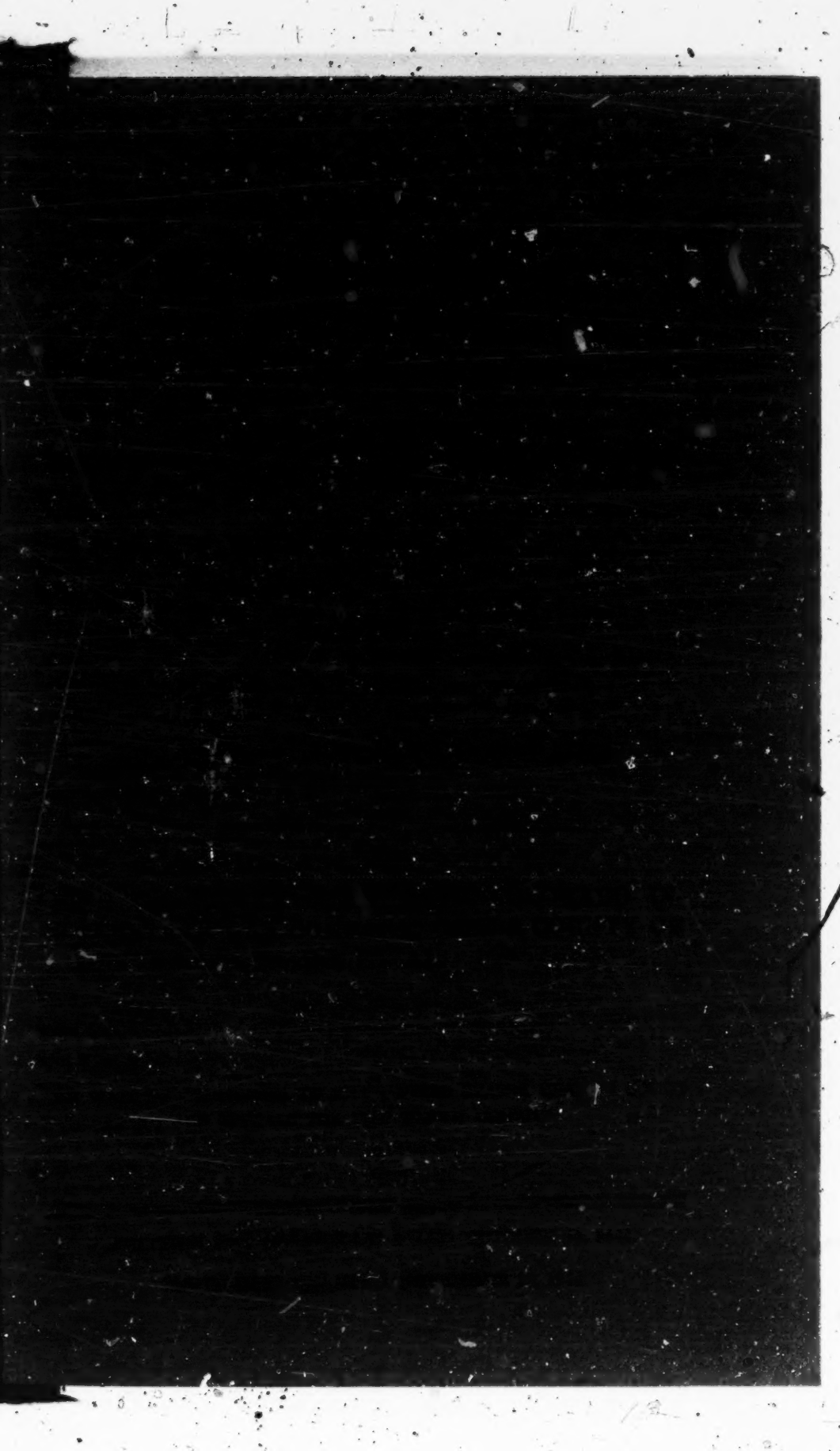

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IN THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE TENTH CIRCUIT.

No. 2561.

COLORADO-WYOMING GAS COMPANY, a corporation, PETITIONER,

vs.

FEDERAL POWER COMMISSION, COLORADO INTERSTATE GAS COMPANY a corporation; CITY & COUNTY OF DENVER, COLORADO; PUBLIC SERVICE COMMISSION OF WYOMING; PUBLIC SERVICE COMPANY OF COLORADO; and CANADIAN RIVER GAS COMPANY, RESPONDENTS.

Petition of Colorado-Wyoming Gas Company for Review of Rate Order of The Federal Power Commission.

Colorado-Wyoming Gas Company, a corporation, hereinafter called "petitioner," feeling itself aggrieved by the final Order of the Federal Power Commission, of date March 18, 1942, entered in those certain causes bearing Docket Nos. G-118, G-121 and G-124 (consolidated for hearing) then pending before said Commission, respectfully petitions this Honorable Court to review and set aside said Order, and in support of its petition respectfully represents and shows:

I.

Petitioner is a private corporation organized and existing under the laws of the State of Delaware and authorized to do business in the States of Colorado and Wyoming. It owns and operates a natural gas transmission pipeline, extending from a point near Littleton, Colorado, (where it connects with the main transmission natural gas pipeline of Colorado Interstate Gas Company, extending from Clay-

ton Junction, New Mexico, to a point near the City of Denver) in a northerly direction and terminating at the "city gate" of Cheyenne, Wyoming, a distance of approximately one hundred fourteen (114) miles. It maintains its principal office and place of business at Denver, Colorado.

II.

Respondent Federal Power Commission, hereinafter called "Commission," is an administrative and regulatory body created by statute, derives its authority and jurisdiction herein under an Act of Congress known as the Natural Gas Act (15 U.S.C.A. 717, et seq.), and has its principal office and place of business in the City of Washington, District of Columbia.

III.

On December 22, 1938, respondent City and County of Denver, Colorado, a municipal corporation, filed a complaint with the Commission against respondents Colorado-Wyoming Gas Company, a corporation, Canadian River Gas Company, a corporation, and Public Service Company of Colorado, a corporation, asking the Commission to investigate and determine the reasonable cost and charge for gas used in the City and County of Denver, and alleging that the contract price for the gas sold by Colorado Interstate Gas Company to Public Service Company of Colorado, at the Denver "city gate," was unjust, unreasonable and discriminatory, and praying that said contract price be abrogated, and that the Commission fix in lieu thereof reasonable rates. This case appears on the Commission's docket at No. G-118.

On or about January 9, 1939, respondent Public Service Commission of Wyoming, a commission created by the statutes of the State of Wyoming, filed its complaint with the Commission, which complaint was docketed as No. G-121, wherein it complained against the rates and charges made and collected by this petitioner from Cheyenne Light, Fuel & Power Company, at the "city gate," Cheyenne, Wyoming.

Your petitioner purchases gas from Colorado Interstate Gas Company and sells a portion thereof to Cheyenne Light, Fuel & Power Company, for resale to domestic, commercial and industrial consumers in Cheyenne, Wyoming.

On or about the 14th day of March, 1939, the Commission instituted, upon its own motion, an investigation of and concerning all rates, charges, classifications, rules, regulations, practices and contracts of this petitioner and of Colorado Interstate Gas Company, and of Canadian River Gas Company, which cause is entered upon the docket as No. G-124.

Thereafter, and on or about the 13th day of September, 1940, the Commission entered its order consolidating for hearing said causes, to-wit: Docket Nos. G-118, G-121 and G-124, and set the hearing therein for October 28, 1940.

Thereafter, said hearings in said causes so consolidated were held before a trial examiner appointed by the Commission; continued from the 28th day of October, 1940, to the 21st day of April, 1941; and occupied 102 hearing days. The transcript of the testimony consists of more than 15,000 pages and the exhibits number substantially more than 300.

IV.

As of March 18, 1942, the Commission made and entered its final rate orders in said causes, therein requiring that the rates and charges made by this petitioner for the distribution and sale of natural gas for resale in intrastate and interstate commerce, under its rate schedules F.P.C. Nos. 1 to 5, inclusive, be reduced by not less than $119,000.00 per year; and, further, requiring substantial reductions in such rates to be charged by respondents, Canadian River Gas Company and Colorado Interstate Gas Company, to this petitioner.

By said order, served on this petitioner March 26, 1942, this petitioner was required, on or before May 25, 1942, to file with the Commission new schedules of rates and charges for or in connection with the transportation and sale of natural gas in intrastate and interstate commerce for resale, to reflect the reductions ordered, of $119,000.00 per year.

By said Opinion and Order of the Commission of the date of March 18, 1942, it was ordered inter alia, as follows:

"(A) The rates and charges made, demanded, or received by Colorado-Wyoming Gas Company for the transportation and sale of natural gas for resale in interstate commerce under its Rate Schedules FPC Nos. 1 to 5, inclusive, shall be reduced by not less than $119,000 per year;

"(B) Colorado-Wyoming Gas Company shall file on or before May 25, 1942, new schedules of rates and charges for or in connection with the transportation and sale of natural gas in interstate commerce for resale to reflect the reductions ordered in paragraph (A) above, which new schedules of rates and charges shall be effective as to all bills regularly rendered on and after June 15, 1942;"

V.

On April 20, 1942, in form and manner and within the time prescribed by the applicable rules and regulations of said Commission, petitioner filed with the Commission its "Petition of Colorado-Wyoming Gas Company for Rehearing, Reconsideration, Vacation and Modification of the Opinion and Order of the Commission Herein, Both of Date March 18, 1942."

The said Commission thereafter on, to-wit, the 13th day of May, 1942, denied said petition for rehearing, reconsideration, vacation and modification of said order of date March 18, 1942; that thereby and thereafter the said order became fixed and is now a final order and judgment of said Commission; that petitioner is aggrieved thereby, for the reasons hereinafter stated; petitioner has exhausted its remedies before said Commission; and now seeks review thereof, all in form and manner as permitted and prescribed by law.

VI.

The jurisdiction and authority of this court is invoked under Section 19 (b) of the Natural Gas Act, aforesaid (52 Stat. 831; Title 15 U.S.C. 717r).

VII.

Specification of Errors.

The Federal Power Commission in its said findings, conclusions and orders, committed error in the following particulars, upon each of which Petitioner intends to rely:

1. The finding that "During the year 1939 Wyoming Company transported and sold a total of 2,860,000 mcf of natural gas" (at 14.4 lbs. plus 4 oz., being a pressure base of 14.65 lbs.) (Op. page 9) is not supported by and is contrary to the uncontradicted evidence in the record. During the calendar year 1939, at the pressure above indicated, the purchases (that is, gas "transported" were 2,935,844 mcf and total deliveries (that is, gas "sold") were 2,856,801 mcf.

2. The finding and conclusion (Op. pages 10, 12) that the Commission has rate regulatory jurisdiction over sales for resale by Colorado-Wyoming Company in Colorado, to its parent company (100% ownership), Public Service Company of Colorado, and other companies (Greeley Gas and Fuel Company and Highway Gas Company) is not supported by and is contrary to the facts and the applicable law. The decision in Illinois Natural Gas Company v. Central Illinois Public Service Company, et al., 62 Sup. Ct. 384, cited and quoted by the Commission (Op. page 12), is not authority for the conclusion of jurisdiction adopted by the Commission.

3. The statements or findings that "Wyoming Company offered only 'actual construction costs, less observed depreciation, plus working capital and additions to plant, now and immediately in course of construction.' Commission staff restricted its plant studies to original cost and offered evidence of that character" (Op. pages 13, 14), are not supported by the record and are contrary thereto.

4. The Commission erred in that it failed and refused to consider actual "cost" and "original cost" in arriving at its determination of "rate base", as set up in the opinion and order herein, in that substantial items of such cost were rejected by the Commission.

5. The statements or findings of "original cost, as of December 31, 1939 — claimed by Company — $1,860,522"

(Op. page 14) and "original cost claimed by Wyoming Company of $1,712,114" (Op. page 23) are inconsistent, misleading, contrary to the record, and do not reflect the position and contentions of Colorado-Wyoming Company.

6. The finding and conclusion with respect to "interest on non-utilized facilities" (paragraph (1) Op. page 23) is not supported by and is contrary to the evidence and the law properly applicable to the uncontradicted relevant facts.

7. The finding and conclusion with respect to "interest during construction" (paragraph (2) Op. page 23) is not supported by and is contrary to the evidence and the law reasonably applicable to the established facts.

8. The finding and conclusion with respect to "miscellaneous adjustments" (paragraph (3) Op. page 24) is not supported by and is contrary to the evidence and the applicable law.

9. The sundry statements, argumentative generalizations, and conclusions under the heading entitled "Accrued and Annual Depletion, Depreciation and Amortization" (Op. pages 24-27) are not responsive to or consistent with the record herein, common experience, or the law applicable. In particular, the following generalizations of fact and law are not supported by but are contrary to the evidence in the record herein and are purely speculative and arbitrary.

"The determination of the annual allowances for * * *, depreciation * * * and the accrued depreciation in the properties must be consistent. * * *

"But, the principle of consistency is flagrantly violated in the evidence introduced by the companies in this proceeding. The accrued depreciation used by the companies is based upon observed percent condition of the property, which in a large measure is merely observed deferred maintenance. * * * Under the obse[illegible]n theory a high observed percent condition and consequently a low existing accrued depreciation result for many items of plant right down to the instant before they suffer the breakdown or obsolescence requiring retirement.

* * * * * *

"The evidence of the Commission staff treats accrued and annual allowance for depreciation on a simple, consistent, and reasonable basis. It is the application of the service life principle. • • • Its total life in service can be reasonably estimated with due consideration given to such influencing factors as probable life of the enterprise, gas reserves, obsolescence and inadequacy. • • • "

(Op. pages 24-26)

10. The finding of the Commission that "The net accumulation of these annual charges (Note: that is, the 'estimated' total service life divided into equal annual amounts) is the best possible determination of the expired outlay, hence the best measure of the actual depreciation existing in the property as of that date" (Op. page 26), is erroneous, in that such finding is contrary to fact and in conflict with the evidence in this record.

11. The "Conclusions as to Depreciation, Depletion and Amortization," wherein it is said:

"In view of the foregoing, the Commission adopts herein the service life principle for determining annual and accrued depreciation • • • . No serious controversy arose over the estimated service lives used by the Commission staff for the various classes of property other than main line pipe. These estimates stand as reasonable, and are adopted. • • • " (Op. pages 32-33)

are not supported by the record, are contrary to the evidence and are purely arbitrary and speculative. There is no evidence in this record from which "total life in service can be reasonably estimated," with respect to this defendant's property. Furthermore, there is serious controversy over the assumed service lives, unsupported by evidence, used by the Commission staff for the various classes of property, including main and branch line pipe, which constitute by far the great preponderance of plant cost and value.

12. The Commission, in its determination of "rate base," erred in giving no consideration whatever to actual accrued depreciation and the elements thereof, as universally defined by the courts and adopted by the Com-

mission itself as a measuring rule (Uniform System of Accounts, Natural Gas Act, Definition 14).

13. The Commission erred in ignoring and discarding entirely the uncontradicted evidence with respect to present service condition of the depreciable plant and property of this defendant.

14. The Commission erred in failing and refusing to find and give any effect whatever in its determination of "rate base" to the actual accrued depreciation of its depreciable plant and property as established by defendant company, through clear, specific and uncontradicted evidence at the hearings herein.

15. The Commission erred in its findings and conclusions as to "working capital" requirements of this defendant (Op. pages 35-36), which said findings and conclusions are not supported by and are contrary to the evidence and the weight of the evidence.

16. The Commission erred in its findings as to "Property Additions" of this defendant company (Op. page 36) during the years 1940 and 1941, which said additions were $39,246 in 1940 and $46,913 in 1941, a total of $86,169 instead of $78,813, as found by the Commission.

17. The Commission erred in excluding the sum of $12,183 from rate base as averaged "Contributions in Aid of Construction," (Op. page 37) in that none of the amounts making up the above total sum were contributed by customers (contrary to assumption, (Op. page 38) receiving service over which the Commission has rate regulatory jurisdiction, and the findings so made are not in conformity with law.

18. The Commission erred in its findings and conclusion denying "going concern value" in any amount whatever to defendant company (Op. pages 37-38), contrary to the evidence in the record and the applicable controlling law.

19. The Commission erred in its conclusion denying "going value," based on the findings that "the amount thereof is a judgment figure wholly unrelated to any costs or outlay" (Op. page 37) and is a "fictitious element of value" (Op. page 38), the former of which findings is not

relevant to the determination of the issue of "going value," and the latter of which findings is a mere characterization not in any manner or at all supported by the record.

20. The Commission erred in its "Conclusions as to Rate Base" of this defendant (Op. page 38), in that the same is not supported by and is contrary to the evidence, and is not justified by law but contrary thereto. The amount designated by the Commission as the "original cost as of December 31, 1939" of Colorado-Wyoming Company is less than the "bare bone" cost of the items of physical property only, as shown by the record herein, with no allowance whatever to cover "the cost of preliminary studies, plans, surveys, engineering, supervision and general expenses, which contribute directly and immediately to gas plant" (Uniform System of Accounts, Natural Gas Act, Instructions—Gas Plant Accounts 3. C. p. 38), and with no allowance whatever for "going concern value," that value which attaches to an assembled, operating and well managed enterprise, with business developed and attached. The Commission's so-called "original cost" is not such cost, either in fact or in law. The deduction of "accrued depreciation" so-called, in the amount of $395,944, is an accounting entry only and bears no actual or legal relation whatever to the condition or value of this defendant's property and plant in 1939, or at any other time. The so-called "Depreciated Original Cost" thus arrived at (plus "working capital" and "additions" less "customer contributions" as fixed by the Commission) is then found by the Commission to be the "rate base" and is described by it as "Prudent Investment" (Op. page 38), contrary to the meaning and judicial definition of that term both in fact and in law.

21. The Commission erred in failing and refusing to find and give effect to actual or reasonable "cost of preliminary studies, plans, surveys, engineering, supervision and general expenses which contributed directly and immediately to gas plant without duplication of such costs," in that such items actually and necessarily are part of and were comprehended in the "cost" and "original cost" of plant and property by this defendant, and the "prudent investment" therein, under the law and the evidence.

22. The Commission in its findings and conclusions as to the "rate base" of this defendant erroneously discards and excludes the "fair value" of the Company's plant and property, without authority of and contrary to the Natural Gas Act and the controlling principles and rules of law applicable.

23. The Commission erred in adopting the 1939 operations, revenues and expenses of this defendant as the measuring rod for the prospective operation of its rate reduction order of date March 18, 1942. All operations, revenues and expenses of Colorado-Wyoming Company for the year 1940 are in the record herein. The Commission statement that "the only complete income statements are to be found in Commission staff exhibits" (Op. page 39) is in error, is not supported by and is contrary to the record, in so far as this defendant is concerned. The assumption that "all factors considered (Note: which of necessity must include vastly heavier Federal taxes, which in 1939 were 16%, in 1940 were 24%, in 1941 were 31%, and in 1942 will be substantially higher) it may reasonably be expected that revenues will increase as rapidly, if not more rapidly, than costs for all three companies. Nevertheless, for the purposes of this order 1939 revenues and costs are considered to be representative of the relationship that will exist between these items in the immediate future" (Op. page 40) is without foundation in the evidence, and on the face of the opinion (Op. pages 3, 39-40) is argumentative, purely speculative and arbitrary. After the prediction above quoted, the Commission then strangely states "Prediction of future conditions, particularly under present emergency conditions, is beset with more than average difficulty." The Commission apparently is quite unmindful of operations of the year 1940 (fully covered in the record) and the year 1941, now also history. Yet the Commission erroneously predicts and concludes that "Use of 1939 figures, however, undoubtedly resolves most of the doubts as to future operation conditions in favor of the companies." The Commission conclusions are "guesswork and no more."

24. The Commission erred in failing to find and give any effect whatever to the 1940 operations, revenues and ex-

penses of Colorado-Wyoming Company, in its determination of "income available for return."

25. The Commission erred in determining the operating revenues of this defendant for the year 1939 to be $828,941 (Op. page 40). This was done by the erroneous elimination of a charge-off for Bad Debts in that year in the amount of $442, and the increase of revenues by that amount.

26. The Commission erred in finding "total operating expenses for 1939 of $85,364" (Op. page 47) resulting from the arbitrary exclusion from expense for that year, of $922, which it is said "represents a series of minor adjustments" (Op. page 47).

27. The Commission is in error in its finding that "The 1939 cost of purchased gas * * * was $498,103" (Op. page 47). This error results from the exclusion, from the Commission's total cost, of gas purchased from the Berthoud, Colorado field (51,069 mcf) in the amount of $5,107 during the calendar year 1939, together with carrying charge of $1,029.72, a total of $6,136, which should be added to the cost of purchased gas as set forth by the Commission. Gas purchased from Colorado Interstate Gas Company alone is included however in the Commission's figure above quoted. The sale of such Berthoud Field gas is included in Colorado-Wyoming Company "Operating Revenues 1939" (Op. page 40).

28. The Commission erred in its finding of "Total Revenue Deductions $678,853" (Op. page 48) to the extent of not less than $7,059, which should be reflected therein and added thereto.

29. The Commission erred in finding "$150,088 as the 1939 income available for return" (Op. page 48). This amount reduced by $7,059, the additional revenue deductions above pointed out, and $442 reduction in total revenue resulting from "Bad Debt" charge off, leaves not more than $142,387 as the 1939 income available for return, on the basis of computation employed by the Commission in its opinion herein.

30. The Commission erred in its finding that 6½% "is the maximum rate of return that can be considered fair"

(Op. page 52) for this defendant, in that the standard so announced by it is not supported either by the record or the law applicable. In arriving at this conclusion, the Commission did not consider and give effect to the detailed and uncontroverted evidence establishing an unusual risk and actual hazard, resulting from the subordination of the gas supply of Colorado-Wyoming Company to the prior rights to service enjoyed by the Cities of Denver and Pueblo, both of which are also nearer the source of supply.

31. The Commission erred in its summarized "Conclusions as to Amount of Excesive Returns" of this defendant, found to be $61,298, in that the "rate base—$1,366,000" is erroneous; the "Income available for return—$150,088" is erroneous; and "6½% on rate base $88,790" is erroneous (Op. page 53).

32. The Commission erred in finding that the earnings of Colorado-Wyoming Company are in excess of a reasonable return in any amount whatsoever.

33. The Commission erred in finding that its "determination of earnings in excess of a reasonable return • • • is based upon all the components of a rate case" (Op. page 53), in that such is not the fact and the so-called "components" as determined by the Commission are incorrect, not supported by the evidence, and contrary to law.

34. The Commission erred in failing and refusing to find that the existing rates and charges of Colorado-Wyoming Company are just and reasonable.

35. The Commission erred in its findings, despite the unquestioned fact that this defendant company is completely separate from and independent of the Candian River Company and the Colorado Interstate Company, in ownership, in control, in management and in operation, that

"However, to stop there is to ignore realities. The entire project, although involving facilities of three corporate entities, is, for all practical purposes, a single project now designed to produce, gather, transmit and sell natural gas from the Texas Panhandle field to consumers along the line as far north as Cheyenne, Wyoming" (Op. page 54).

The finding in question is without factual support in the record and directly contrary to law and to all relevant evidence.

36. The Commission erred in finding, as a basis for the application of the undisclosed method of allocation adopted by it, although "there are present in the proceeding three separate and distinct rate cases" (Op. page 53), and "although involving facilities of three corporate entities" (Op. page 54), two of which are wholly alien and unrelated to Colorado-Wyoming Company in ownership, control, management or operation, that, nevertheless, the three company defendants herein constitute "for all practical purposes, a single project" (Op. page 54). This conclusion is not supported by and is contrary to all the evidence in the case and to the law applicable to this situation.

37. The Commission erred in ignoring and discarding the "complete presentation of the entire operations" property, plant, revenues and expenses of this defendant "broken down between jurisdictional and non-jurisdictional operations" for the year 1940 as well as the year 1939.

38. The Commission erred in its finding that

"All that can be accomplished by an allocation of physical properties can be attained by allocating costs including the return." (Op. page 55)

in that said finding is contrary to the evidence and the weight of the evidence and the applicable law.

39. The Commission erred in its finding that

"Commission staff exhibits on cost allocation followed principles that have long been recognized as reasonable in the public utility field and are widely accepted." (Op. page 56)

in that said finding is contrary to fact, the record and the law.

40. The Commission erred in its findings and conclusions as to the alleged manner in which the asserted principles of allocation are applied in this case (Op. page 56), in so far as this defendant is concerned, in that the said conclu-

sions are not in accordance with, but inconsistent with, fact and the evidence in this record.

41. The Commission erred in failing and refusing to find and give effect in its "allocation of costs" to the uncontradicted and conclusive evidence in the record that, in the use of gas and the facilities of this defendant, domestic customers have preference over industrial customers; that such priority is expressly stipulated in all contracts of purchase and sale; that it is embodied in all franchise grants by cities and towns as a condition of permission to serve gas in such municipalities; and that such principle or rule of priority is of necessity applied and enforced in the actual normal winter operations of this defendant, by curtailment or shut-off of industrial consumers.

42. The "Allocation of Costs for Wyoming Company," as set forth in the methods and conclusions of the Commission (Op. pages 59-60) is in direct conflict with the uncontradicted facts established by the record, equity and fairness, and the law applicable. The method described by the Commission as "commonly used," is not so used, and the "system peak day" of Colorado-Wyoming Company is not considered or used by the Commission. The so-called modification of "methods of cost allocation presented by Commission staff" wherein it is said "the coincident demands of all customers on the system peak day are used, with exception of deliveries to Highway Gas Company" (Op. page 60) is in error, in that neither "system peak day" of Colorado Interstate Gas Company nor system peak day of Colorado-Wyoming Company is used either in the computations by Commission staff or by the Commission itself. There is in the record presentation by Commission staff, relied upon by the Commission in its opinion herein, no evidence whatever of "system peak day" demands or deliveries upon or by Colorado Interstate Gas Company or Colorado-Wyoming Company—in the year 1939 or any other year. All evidence by Commission staff purporting to reflect "system peak day" demands or deliveries is shown conclusively by the record to be either averages, estimates or guesses.

43. The Commission in its "allocation of cost for Wyo-

ming Company" could not and, therefore, did not follow either the formula of allocation presented by the Commission staff (even if it were correct in theory, which this defendant denies) or the equally erroneous modified formula "adopted" by it (Op. pages 59-60), in that there is no evidence in the record offered by the Commission staff other than averaged speculative estimates of "the separate class peaks of resale customers and the main-line industrial customers," or of "the coincident demands of all customers on the system peak day." Nor did the Commission, in its determination, use "the system peak day" of Colorado-Wyoming Company in 1939 or any other year.

44. The finding

"Deliveries to Highway Gas Company are for all practical purposes an exchange of gas with Goodstein Pipeline Company. The total amount of revenue involved is less than $700 per year. In view of these facts no attempt was made to make a special cost study and costs have been assumed to equal revenues." (Op page 60)

is not in conformity with the fact or the record, in that the purchases of gas from the Berthoud, Colorado field ($5,107 in 1939; $5,490 in 1940) are entirely independent of gas sales to Highway Gas Company ($693 in 1939; $1,045 in 1940).

45. The finding as to "excess returns" of Colorado-Wyoming Company in the amount of $159,000 (Op. page 60) is erroneous, in that each and every of the amounts used by the Commission to arrive at the said amount of $159,000 are incorrect and erroneous.

46. The summarized "allocation of costs" of Colorado-Wyoming Company, shown in table (Op. page 61), is erroneous with respect to "revenue" "allocated costs," and "excess revenue over costs," as applied to the three classifications "Direct Industrial Sales," "Sales to Public Authorities," and "Sales to other Gas Utilities." The total of "revenue" is correct, although the distribution thereof is not in conformity with the record. The so-called "allocated costs" are erroneous both in total and in distribution, are arbitrary, are factually inaccurate, are unreasonable, are contrary to the record, are not understandable, are predi-

cated on assumed facts and theories bearing no relation in fact or reason to the operations of Colorado-Wyoming Company, and are in defiance and disregard of all principles and requirements of priorities between domestic and industrial customers. The manner in which such "allocated costs" are arrived at by the Commission is not disclosed or discernible from the opinion or the record. The "excess revenue over costs" presumably are balancing figures and of necessity are erroneous, in that each and all amounts shown in the "revenue" and "allocated costs" columns are inaccurate and contrary to the evidence in this case.

47. The "Allocated Cost of Service—Sales to other Gas Utilities, 1939" (Op. Ex. B), while substantially accurate with respect to columns covering MCF sales, "revenue" and "Average Revenue ¢/MCF," are erroneous with respect to columns covering "allocated cost of service," "excess revenue over cost" and "Average Cost ¢/MCF," in that the amounts shown in such columns are predicated upon the erroneous so-called principles and methods of allocation presented by the Commission staff as modified by the Commission in its opinion. The proportion of distribution of "excess revenue over cost" to the several utilities specified, as ordered, is both arbitrary, impractical, unworkable, unfair and without support in the record, and further demonstrates the patently erroneous and arbitrary character of the Commission's entire procedure of allocation.

48. The Commission finding that "All Wyoming Company 'sales to other gas utilities' • • • are under its jurisdiction," (Op. page 61) is erroneous both in fact and in law.

49. The Commission erred in applying to this defendant methods of allocation not in any manner predicated upon or related to the actual business and operations of Colorado-Wyoming Company in 1939, or in any other year.

50. The Commission erred in not adopting and applying the principles and methods of allocation of plant, property, revenues and expenses fully and completely in evidence presented by this defendant for the years 1939, 1940 and subsequent years.

51. The Commission erred in making and entering its

formal findings numbered 2 to 13, both inclusive and each thereof (Order, pages 2-3), in that none of said formal findings is supported by the evidence, the preponderance of the evidence, or by substantial evidence and each and every of said findings is contrary to the evidence and the preponderance of the evidence in the record in this case.

52. The Commission erred in making and entering its formal orders (lettered (A) to (D)), both inclusive and each thereof, in that none of said formal orders is supported or justified by the applicable controlling law and each and every of said formal orders is contrary to law and the evidence and the preponderance of the evidence in the record herein.

53. The Commission erred in failing and refusing to make and enter the several findings and orders, (numbered 1 to 42, both inclusive), and each thereof, as requested by this defendant in its opening "Brief and Argument" before the Commission at pages 145 to 152, inclusive, in that each of said requested findings and orders is in conformity with the evidence, and the preponderance of the evidence, in this record and the law applicable and controlling.

54. The Commission has erred and denied to this defendant "due process," in that, throughout its opinion, it has announced general, vague, and argumentative ultimate conclusions, instead of making a "suitably complete statement" of the facts with respect to each of the several issues joined herein, and thereupon declaring "the basic or essential findings" of fact flowing from the evidence "required to support the Commission's order," whereby it is impossible to determine whether or not the controlling statutory and legal standards have been applied; the rights of this defendant are thus "whittled away"; and the opinion, as a consequence, becomes merely "a perfunctory process."

This specification relates particularly to the several findings and conclusions of the Commission in relation to cost of plant, accrued and annual depreciation, rate base, going concern value, adoption of the year 1939 as the measuring rod of its findings, conclusions and orders, net return, excessive return, rate of return, allocation of costs and distribution of alleged excess revenue.

55. Throughout its opinion this Commission has misconstrued and misapplied the "Natural Gas Act," greatly to the prejudice and deprivation of this defendant, in that the Commission has failed to distinguish between the specific statutory functions and authorities vested in the Commission and the judicial function vested in the courts. The Commission herein has undertaken to establish what it conceives to be "the lowest possible reasonable rate," instead of following the clear statutory grant of authority declaring that, in fixing rates, "The Commission shall determine the just and reasonable rate * * * and shall fix the same by order." (Act, Sec. 5 (a)).

Thus, it has failed to observe those standards which Congress has made "prerequisite to the operation of its statutory command." By reason of such failure and misconstruction of the statute under which alone it derives its authority, the Commission has greatly exceeded such authority, has disregarded the law under which it operates, and has denied "due process" of law to this defendant, in each and all of the matters stated in these specifications.

56. The Commission erred in adopting, as its measuring rod of reasonableness of rates and service, the year 1939, in that, said year was a normal pre-war year, whereas, the order of the Commission is prospective and effective and operative only beginning in this year 1942, in which all normal peace-time economic, financial and living standards have been supplanted, superseded and discarded by orders of government and the necessities of national defense.

57. The Commission erred in making and entering any order other than one of dismissal or continuance of this rate case, in that, there is no factual evidence whatever whereby the Commission can, other than by speculation or guesswork, appraise the present and future operation and effect of the existing national and world-wide unprecedented emergency upon the costs, service and operations of this defendant.

58. That the findings and order of the Commission herein will, in operation and effect, deprive Colorado-Wyoming Company of its property without due process of law, con-

trary to and in violation of the Fifth Amendment to the Constitution of the United States.

59. That the findings and order of the Commission herein will, in operation and effect, constitute a confiscation of the property of Colorado-Wyoming Company without just compensation, or any compensation, being paid therefor.

60. The Commission erred in making and entering its "Opinion No. 73" herein, and in making and entering its "Order Reducing Rates Colorado-Wyoming Gas Company" herein, of date March 18, 1942, in that the same are not supported by substantial evidence and are contrary to law.

61. The Commission erred in overruling and denying on May 13, 1942, "Petition of Petitioner for Rehearing, Reconsideration, Vacation and Modification of the said Opinion and Order of the Commission herein," of date March 18, 1942.

Wherefore, Petitioner prays:

(1) That upon the filing hereof, the Clerk of this court serve a copy of this petition upon the Honorable Leland Olds, Chairman of the Federal Power Commission, Respondent herein, and upon each of the other respondents herein, and command said Commission, within forty (40) days from the date thereof, to certify and file in this court transcript of the record upon which the order complained of was entered, including all pleadings, orders, transcript of testimony, exhibits, report and recommendations of the Trial Examiner, findings, conclusions and order of the Commission of date March 18, 1942, petition for vacation, rehearing and stay and opinion and order denying said petition for vacation, rehearing and stay, all in form and manner as provided by law.

(2) That on final hearing and determination hereof, the said findings, conclusions and order of said Commission of date March 18, 1942, be in all things set aside, reversed and held for naught.

(3) For such other and further relief as shall appear to be meet and equitable in the premises.

Filed July 10, 1942. Robert B. Cartwright, Clerk.

Order Staying Orders of Commission etc.

Twentieth Day, March Term, Saturday, May 16th, A. D. 1942. Before Honorable Sam G. Bratton, Honorable Walter A. Huxman and Honorable Alfred P. Murrah, Circuit Judges.

This cause this day coming on for hearing before the court, upon the petition of Colorado-Wyoming Gas Company for a stay pending the completion and determination of review of the "Order Reducing Rates" of the Federal Power Commission, dated March 18, 1942, which Order (incorporating Opinion No. 73 of said Commission) was entered by said Commission in Causes Nos. G-118, G-121 and G-124 on the docket of said Commission.

And it appearing to the court that on May 13, 1942, said Commission, by Order entered on that date, denied the petition for rehearing and stay, theretofore, on April 20, 1942, filed by Colorado-Wyoming Gas Company in said proceedings.

And it further appearing to the court that each of the respondents herein has been duly served with copy of said petition filed herein, and of notice of this hearing;

And it further appearing that the amount, character and time of ordered reduction affecting this petitioner were and are as set forth in said Commission Order of March 18, 1942, as follows:

"(A) The rates and charges made, demanded, or received by Colorado-Wyoming Gas Company for the transportation and sale of natural gas for resale in interstate commerce under its Rate Schedules FPC Nos. 1 to 5, inclusive, shall be reduced by not less than $119,000 per year;

"(B) Colorado-Wyoming Gas Company shall file on or before May 25, 1942, new schedules of rates and charges for or in connection with the transportation and sale of natural gas in interstate commerce for resale to reflect the reductions ordered in paragraph (A) above, which new schedules of rates and charges shall be effective as to all bills regularly rendered on and after June 15, 1942;"

And it further appearing that of the total amount of ordered reduction in the sum of $119,000.00 per annum, the sum of $98,000.00 represents the amount by which the rates of respondent Colorado Interstate Gas Company, chargeable against Petitioner, were on March 18, 1942, concurrently ordered reduced by the Federal Power Commission so that the net amount after offsetting the saving available to Petitioner, by reason of such ordered reduction in rates chargeable by Colorado Interstate Gas Company, is the sum of $21,000.00 per annum, in event the Order of the Commission shall be sustained on review by this court;

And it further appearing that the said Colorado Interstate Gas Company has signified its intention to seek judicial review of said Order and has petitioned this court for a stay pendente lite of the same affecting the aforesaid determination that its rates applicable to Petitioner and effective, in accordance with rate schedules ordered to be filed by it May 19, 1942, be reduced in the amount of $98,000.00, which application has been heard in conjunction with that of the Petitioner herein, and has been granted under requirements similar to those imposed by this Order on Petitioner as conditions of ordering such stay;

And the court having considered the petition herein, and heard the argument of counsel thereon, does find that it is necessary for the exercise of this court's jurisdiction in the review of said Order, under the Natural Gas Act, that the matter be held in status quo until the review herein, at the instance of Colorado-Wyoming Gas Company, is perfected and finally determined.

It is now, therefore, hereby ordered that the said Order of the Federal Power Commission be and the same is hereby stayed and suspended until the further order of this court, in so far as it is directed to or affects the Petitioner, Colorado-Wyoming Gas Company.

And it is further ordered that the Federal Power Commission and Leland Olds, Claude L. Draper, Basil Manly, John W. Scott and Clyde L. Seavey, the persons constituting the Federal Power Commission, and their successors in office, and each and all of the other respondents, and the agents and attorneys of each and all of the respondents,

be and they are hereby enjoined and restrained, until the further order of this court, from enforcing, causing to be enforced, or attempting to enforce, against the Petitioner, Colorado-Wyoming Gas Company, the said order of the Federal Power Commission dated March 18, 1942, entered in the above numbered causes on the docket of the Commission; and from taking any steps or instituting any proceedings, or causing any steps to be taken or proceedings to be instituted against Petitioner, Colorado-Wyoming Gas Company, its officers, agents or employees, to enforce any penalties, fines or other remedy for disregarding said Order of March 18, 1942.

This Order is made upon the condition that the Petitioner, Colorado-Wyoming Gas Company, shall pay, or cause to be paid, to the purchasers of natural gas under its rate schedules F.P.C. Nos. 1-5, inclusive, referred to in said Order of the Commission, as their several interests appear, the amount representing the reduction in the gross revenues of Colorado-Wyoming Gas Company which shall have accrued pending a determination of this review proceeding, to the same extent as if new schedules of rates and charges had been filed by Colorado-Wyoming Gas Company on May 25, 1942, pursuant to said Order of the Commission requiring a reduction in said rates and charges of not less than $119,000.00 per year, together with all costs which may be adjudged against Colorado-Wyoming Gas Company should said Order of the Commission be sustained; and as surety, and solely in lieu of bond, shall deposit with the First National Bank of Denver, Colorado, or any other Federal depository to be approved by this court, or a Judge thereof, under an escrow agreement also to be approved by this court, or any Judge thereof, on or before June 15, 1942, the sum of $1,750.00; and the sum of $1,750.00 on the 15th day of each succeeding calendar month thereafter until said review proceeding is finally determined and adjudicated.

The said amounts so deposited shall remain on deposit in said bank or banks pending a determination of said review proceeding, and said deposit shall be kept in a separate account as a special deposit, and said bank or banks shall furnish each month a certificate to the Clerk of this court and a copy thereof to the Federal Power Commis-

sion; that said moneys have been thus deposited, and remain on deposit as provided herein and in said escrow agreement; subject, however, to the further order or orders of this court, to be returned to such ultimate consumers of gas or persons to whom the court shall find the same should be returned, as contemplated by the provisions of the Natural Gas Act.

Nothing in this Order contained shall be considered as a determination of the amounts eventually to be refunded by Colorado-Wyoming Gas Company upon the final determination and adjudication of said review proceeding.

The cost, consisting of the escrow fee and the cost of refunding the escrow funds in the event a refund is ordered, shall be assessed by the further orders of this court.

Denver, Colorado, May 18, 1942.

The First National Bank of Denver, Colorado, Denver, Colorado.

Dear Sirs: Enclosed herewith is a certified copy of an order of this, the Tenth Circuit Court of Appeals, made and entered May 16, 1942, in Case No. 2561, Colorado-Wyoming Gas Company, a corporation, Petitioner, vs. Federal Power Commission, et al., Respondents, wherein Colorado-Wyoming Gas Company is directed to deposit with you, or some other Federal depository approved by this court, as a special deposit the sum of $1,750.00 on or before June 15, 1942, and to make monthly additional special deposits, as set forth in said order. Said special deposits are to remain on deposit pending the final determination and adjudication of the review proceedings, and are to be disbursed upon the further order of this court, all as set forth in said order of May 16, 1942.

Will you accept, hold and finally disburse all of said special deposits and act as escrow agent or holder thereof, all in accordance with the terms of said order and the further orders of this court. If so, will you acknowledge your acceptance by signing the copies of this letter at the place indicated, and return to the undersigned at once.

The Colorado-Wyoming Gas Company will make the

first special deposit on June 15, 1942, by a certified check to your order in the amount of $1,750.00.

This letter, and your acceptance of the terms hereof, as indicated, will constitute the escrow agreement mentioned in the order.

Very truly yours,

ROBERT B. CARTWRIGHT, Clerk, United States Circuit Court of Appeals, Tenth Circuit.

Approved: SAM G. BRATTON, Judge.

Accepted: THE FIRST NATIONAL BANK OF DENVER, COLORADO, By P. K. ALEXANDER, Vice-President.

Filed May 18, 1942. Robert B. Cartwright, Clerk.

Order Re Designations of Printed Record.

Forty-third Day, March Term, Tuesday, July 14th, A. D. 1942. Before Honorable Orie L. Phillips, Circuit Judge, and Honorable J. Foster Symes, District Judge.

It appearing to the court that the petition of the petitioner in this cause is to review and set aside an order of the Federal Power Commission and that in cause No. 2550 on the docket of this court Colorado Interstate Gas Company, as petitioner, has likewise filed a petition to review and set aside an order of the Federal Power Commission directed to said Colorado Interstate Gas Company and entered in the same dockets before the said Commission; and it further appearing to the court that in cause No. 2551 on the docket of this court Canadian River Gas Company has also filed a petition to review and set aside an order of the Federal Power Commission directed to it and entered in the same dockets before the said Commission; and it further appearing to the court that under Rule 34 of the rules of this court a single record on review should be prepared in this cause and in said causes Nos. 2550 and 2551 containing all matter designated by all parties to said three proceedings without duplication; and it further appearing from telegrams, the originals or copies of which are on file with the clerk of this court, that in each of said three causes the petitioner therein and the respondent, Federal

Power Commission, in the interest of saving both time and expense and for the purpose of affording time to enable the parties to attempt to agree upon the portions of the transcript to be included in the printed record, have agreed to an extension of time for the filing of the transcript of the record by the Federal Power Commission in said three causes and for an extension of time for the designation of the portion of the record to be printed;

Now, therefore, it is hereby ordered:

1. That a single record on review shall be filed by the Federal Power Commission in said three causes pending herein.

2. That the respondent, Federal Power Commission, shall have to and including the 10th day of September, 1942, within which to certify and file with this court the transcript of record upon which the orders entered by the Federal Power Commission in said three proceedings are now sought to be reviewed in this court.

3. That the petitioner herein shall have to and including the 10th day of October, 1942, within which to file its designation of the portions of the transcript it desires to be contained in the printed record.

4. That the respondents herein, and any intervener herein entitled under the rules of this court to participate in the designation of the record, shall have to and including the 10th day of November, 1942, within which to designate such additional portions of the transcript as they desire to be included in the printed record.

5. That the petitioner herein shall thereupon have to and including the 25th day of November, 1942, within which to designate such further parts of the transcript of the record which are to be contained in the printed record.

Motion to Dismiss.

To the United States Circuit Court of Appeals for the Tenth Circuit and the Honorable Judge Thereof:

Comes now the Public Service Commission of Wyoming by its Attorneys, Ewing T. Kerr, Harold I. Bacheller, and Arthur Kline, specially for the purposes of this motion,

and not generally, in its own behalf and in behalf of such other of the respondents herein as may see fit to appear in this behalf and participate in this motion, and moves the court as follows:

1. To dismiss the petition herein on the ground that it is in the wrong circuit, because (a) the jurisdiction of this court is invoked solely on the ground that Section (19 b) of the Natural Gas Act of June 21, 1938, c556, 52 Stat. 833; Section 717r(b), Title 15 U. S. C. A., provides that:

"Any party to a proceeding under this Act (chapter) aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural gas company to which the order relates is located or has its principal of place of business, * * *"

and it appears upon the face of said petition that:

(a1) Petitioner is a private corporation organized and existing under the laws of the State of Delaware.

(a2) Said petition fails to allege that said company is located in the tenth circuit for which your honorable circuit court of appeals, sitting as a federal court, has and may take jurisdiction as in such cases is made and provided by said natural gas act.

(a3) Said petition fails to allege its principal place of business or any facts to show the place of said company's location or its principal place of business other than that petitioner is a private corporation organized and existing under the laws of the State of Delaware.

(b) It affirmatively appears on the face of said petition that said petitioner is not located in and that it does not have its principal place of business within said circuit.

(c) It affirmatively appears upon the face of the record in said cause by the testimony of the petitioner's own witness and by facts dehors the record that it is not located and that it does not have its principal place of business in said circuit; and this said respondent is ready to verify.

Filed August 15, 1942. Robert B. Cartwright, Clerk.

Order Denying Motion to Dismiss Petition to Review.

Sixth Day, September Term, Monday, September 14th, A. D. 1942. Before Honorable Sam G. Bratton, Honorable Walter A. Huxman and Honorable Alfred P. Murrah, Circuit Judges.

These causes came on to be heard on motions to dismiss the petitions for review filed herein by petitioners, Thomas H. Gibson, Esquire, appearing for City and County of Denver, John P. Akolt, Esquire, appearing for Colorado Interstate Gas Company and Canadian River Gas Company, Donald McCreery, Esquire, appearing for Colorado-Wyoming Gas Company.

By leave of court, petitioners Colorado Interstate Gas Company and Canadian River Gas Company were granted leave to file amendments to their petitions for review. The motions to dismiss filed by the City and County of Denver were renewed as to the petitions of the Colorado Interstate Gas Company and Canadian River Gas Company, as amended. Thereupon the causes were argued to the court.

On consideration whereof, it is now here ordered that the said motions to dismiss the petitions for review of the Colorado Interstate Gas Company, as amended, the Canadian River Gas Company, as amended, and the Colorado-Wyoming Gas Company be and the same are hereby denied.

Order Extending Time for Designation of Printed Record.

Fourteenth Day, September Term, Monday, October 5th, A. D. 1942. Before Honorable Orie L. Phillips, Circuit Judge, and Honorable J. Foster Symes, District Judge.

This cause came on to be heard on the motion of petitioner for an extension of time within which to file a stipulation or designation of the parts of the record to be printed herein and was submitted to the court.

On consideration whereof, counsel for respondent, Federal Power Commission, consenting thereto, it is now here ordered by the court that the said motion be and the same is hereby granted and that the time within which petitioner

may file a stipulation or designation of the parts of the record to be printed herein be and the same is hereby extended to and including the 25th day of November, 1942.

[An order of the United States Circuit Court of Appeals was entered November 24, 1942, extending the time for filing the designation of the printed record to December 10, 1942.]

Stipulation for and Designation of Printed Record

Comes now Colorado-Wyoming Gas Company, Petitioner, and Federal Power Commission and Public Service Commission of Wyoming, Respondents in interest herein (and certain other respondents), pursuant to Rule 34, paragraph 5 of the Revised Rules of the United States Circuit Court of Appeals of the Tenth Circuit and the Orders of Court herein, and respectively stipulate and designate such portions of the transcript and proceedings before this Court, as shall be printed and constitute the "Printed Record" herein, to-wit:

[In conformity with the order of the United States Circuit Court of Appeals, infra, the remaining portion of the stipulated designation of the printed record is omitted.]

Filed December 9, 1942. Robert B. Cartwright, Clerk.

Forty-Seventh Day, September Term, Friday, December 11th, A. D. 1942. Before Honorable Orie L. Phillips, Circuit Judge, and Honorable J. Foster Symes, District Judge.

This cause came on to be heard on the application of petitioner for leave to have the stipulated designation of the record omitted from the printed record in this cause and was submitted to the court.

On consideration whereof, it is now here ordered by the court that that part of paragraph 5, subdivision (d), of rule 34, which provides that the printed record shall contain among other things the designations or stipulations as to the contents of the record, be and the same is hereby waived and that the record in this cause be printed without the inclusion therein of the stipulated designation.

Pleas and proceedings in the United States Circuit Court of Appeals for the Tenth Circuit, at the January and May Terms, 1944, of said Court, before Honorable Sam G. Bratton, Honorable Walter A. Huxman and Honorable Alfred P. Murrah, Circuit Judges.

On the 9th day of September, A. D. 1942, a transcript of the record, pursuant to a petition to review and set aside orders of the Federal Power Commission, was filed in the office of the clerk of the United States Circuit Court of Appeals for the Tenth Circuit, in a certain cause wherein Colorado-Wyoming Gas Company, a corporation, was petitioner, and Federal Power Commission et al. were respondents, which said transcript, as prepared and printed under the rules of the United States Circuit Court of Appeals for the Tenth Circuit, is in the words and figures following:

PLEAS, PROCEEDINGS AND ORDERS BEFORE THE FEDERAL POWER COMMISSION.

In the Matter of

The Investigation of the Natural Gas Gate Rate Charged The Cheyenne Light, Fuel and Power Company by the Colorado-Wyoming Gas Company.

Docket No. G-121.

Petition.

The Public Service Commission of the State of Wyoming respectfully petitions the Federal Power Commission to establish a just and reasonable Cheyenne, Wyoming gate rate schedule for natural gas sold to the Cheyenne Light, Fuel and Power Company by the Colorado-Wyoming Gas Company, and your petitioner shows this honorable Commission:

I.

That petitioner is a "State Commission" as defined in Section 2 (8) of the "Natural Gas Act."

II.

That under the provisions of said "Natural Gas Act" and particularly Section 13 thereof, authority to file this petition is granted.

III.

That the gas distributed in Cheyenne by the Cheyenne Light, Fuel and Power Company is produced in the vicinity of Amarillo, Texas, by the Canadian River Gas Company and piped to Clayton, New Mexico, thence through the Colorado Interstate Gas Company lines to Littleton, Colorado, thence through the Colorado-Wyoming Gas Company line to Cheyenne, Wyoming. All transportation of said natural gas being in interstate commerce.

IV.

That during the year 1937, 477,183 M.C.F. of natural gas were purchased at Cheyenne, Wyoming, by the Cheyenne Light, Fuel and Power Company.

V.

That all of the common stock of the Canadian River Gas Company is owned by the Southwestern Development Company who also owns 42½ percent of the Colorado Interstate Gas Company of which the Public Service Company of Colorado owns 15 percent interest. The Cheyenne Light, Fuel and Power Company and the Colorado-Wyoming Gas Company are both owned by the Public Service Company of Colorado, which is a subsidiary of the City Service Company.

VI.

That your petitioner under its Docket No. 1680, in 1934 endeavored, by investigation, to establish a reasonable rate schedule to be applied by the Cheyenne Light, Fuel and Power Company in its distribution of natural gas to domestic and commercial consumers in Cheyenne, Wyoming. This case developed the information that the gas produced by the Canadian River Gas Company in the vicinity of Amarillo, Texas, was sold to the Colorado Interstate Gas Company, who after transporting same to Littleton, Colorado, a pipeline distance of 340 miles, sold the gas to the Colorado-Wyoming Gas Company for 17 cents per M.C.F. The Colorado-Wyoming Gas Company then transported the gas to Cheyenne, Wyoming, a pipeline distance of 115 miles, and sold the same to the Cheyenne Light, Fuel and Power Company at a gate rate of 42 cents per M.C.F. It appeared that if 17 cents per M.C.F. was a fair and reasonable rate for the sale of natural gas after transporting the same 340 miles, the 42 cent rate for the sale at the Cheyenne City gate, a point 115 miles more distant, was unjust and unreasonable; however, due to the fact that the Cheyenne gate rate was a controlling factor in determining reasonable retail charges, the investigation was frustrated because the transportation and wholesale distribution involved was an interstate operation. It is understood by your petitioner that there has been a slight revision in the above mentioned rates, but that substantially the same situation exists at this date.

VII.

That petitioner, under date of December 9, 1938, unanimously adopted the following motion:

"Under provision of Section 94-116 Wyoming Revised Statutes, 1931, it was moved that the Commission on its own motion make a complete investigation of all rates charged by the Cheyenne Light, Fuel and Power Company, and if any of said rates be found to be unjust, unreasonable, or excessive that said Company be required to show cause why said rates should not be immediately reduced to such amounts as this Commission may find reasonable and that all the provisions of Chapter 94 Wyoming Revised Statutes, 1931, shall apply to this investigation and findings of the Commission, and that a resolution be adopted, by this Commission, and presented to the member of the State Legislature, which body will convene January 10, 1939, petitioning that body to appropriate sufficient funds to conduct a formal investigation of this Company and any other Utility that this Commission deems necessary."

The above resolution was served upon the Cheyenne Light, Fuel and Power Company.

VIII.

That such state investigation concerning retail gas rates as stated in paragraph VII would be greatly facilitated by the Federal Power Commission fixing a reasonable Cheyenne, Wyoming natural gas gate rate.

IX.

That by reason of interlocking stock ownership and certain long term operating agreements it appears that there is no "at arm's length dealing" between any of the aforementioned corporations, and it also appears that these corporations have been able to dictate, when they so desire, unjust, unreasonable, and discriminatory rates that have ultimately developed a burden upon the Cheyenne consumer.

Wherefore, your petitioner respectfully requests that the Commission for the reasons herein set forth, or for any reasons that may be developed through any investigative action of the Commission, as authorized by the "Natural Gas Act," determine and fix a just and reasonable Cheyenne, Wyoming gate rate for all natural gas sold to the Cheyenne Light, Fuel and Power Company.

Separate Answer of Colorado-Wyoming Gas Company.

Comes now the defendant Colorado-Wyoming Gas Company, a corporation organized and existing under and by virtue of the laws of the State of Delaware, and for its separate answer to the complaint or petition of Public Service Commission of the State of Wyoming, alleges, admits and denies as follows, to-wit:

For a First Defense.

1. This defendant denies that the Federal Power Commission has any jurisdiction over any transaction or operation of Colorado-Wyoming Gas Company, and challenges and denies any jurisdiction, power or authority of this Commission to enter any orders, judgments or decrees attempting to change, modify, regulate, or set aside any charge or price at which Colorado-Wyoming Gas Company is selling natural gas to the Cheyenne Light, Fuel & Power Company at the city gate of Cheyenne, in the State of Wyoming, or to enter any orders, judgments or decrees attempting to change, modify, regulate, or set aside any charge or price at which Colorado Interstate Gas Company is selling natural gas to this defendant, or to substitute and prescribe any different charge or price for which Colorado-Wyoming Gas Company shall sell natural gas in the State of Colorado, the State of Wyoming, or elsewhere; and, as grounds for the matters and things alleged in this defendant's First Defense, this defendant alleges that it is not a public utility, and has not devoted its property to the public service but is selling its commodity at wholesale to selected customers under private contract.

This defendant has not and does not now hold itself out as willing or able to serve the public generally with natural gas, or to supply said commodity to any other customers than those customers with whom it has private contracts.

This defendant has never exercised any of the rights or privileges of a public utility or common carrier, nor held itself out as such, and has never exercised the right of eminent domain in the State of Colorado, the State of Wyoming, or elsewhere, and has not transported gas for others nor in any way acted as a public carrier for hire.

This defendant alleges that its enterprise from its inception has always been strictly private in character, and that no part of it is affected with a public interest in the sense that the Congress would have jurisdiction, power or authority to enact legislation purporting to authorize said Federal Power Commission to regulate the prices which it charges for natural gas which it sells.

The Natural Gas Act of 1938, in so far as the same purports to confer, or is interpreted by said Federal Power Commission to confer, on said Commission any jurisdiction, power or authority to regulate, change, modify, or set aside the charges or prices at which this defendant is selling natural gas at wholesale, or to authorize said Commission to determine and fix the charges or prices for which it shall sell such commodity, deprives this defendant of its property and liberty of contract without due process of law, in violation of the Fifth Amendment to the Constitution of the United States, and any rules, regulations or orders promulgated by said Commission for the purpose of exercising any jurisdiction, power or authority, as aforesaid, will be null and void, and contrary to and in violation of said Fifth Amendment to the Constitution of the United States.

For a Second Defense.

Subject to the ruling of this commission and of the courts on this defendant's first defense and the special plea to the jurisdiction of said commission, and without waiving but still insisting on said first defense, this defendant, for its further separate and second defense alleges:

1. Answering paragraph numbered I, this defendant admits each and every allegation therein contained.

2. Answering paragraph numbered II, this defendant admits each and every allegation therein contained.

3. Answering paragraph numbered III, this defendant admits that substantially all of the natural gas distributed in the City of Cheyenne and the State of Wyoming by the Cheyenne Light, Fuel & Power Company is purchased in the vicinity of Amarillo, Texas, by the Canadian River Gas Company; and thence piped to Clayton, New Mexico; and thence through the Colorado Interstate Gas Company lines to Littleton, Colorado, where said gas is sold and delivered

by the said Colorado Interstate Gas Company to this defendant, and thence transported by this defendant through its pipe line to the city gate at Cheyenne, Wyoming, at which point said gas is sold and delivered by this defendant at wholesale to the Cheyenne Light, Fuel & Power Company under contract hereinafter mentioned and referred to. That, in addition to the natural gas supplied and sold to this defendant by the said Colorado Interstate Gas Company, an insignificant part of the natural gas sold and delivered by this defendant at the city gate of Cheyenne to the said Cheyenne Light, Fuel & Power Company, is purchased and obtained by this defendant in the so-called "Berthoud Gas Field," located near the Town of Berthoud, Larimer County, State of Colorado. That the amount of gas thus obtained consists of only a small fraction of one per cent of the total amount of gas sold and delivered by this defendant to the Cheyenne Light, Fuel & Power Company.

Further answering said paragraph numbered III, this defendant admits that the transportation of said natural gas by this defendant from the point of purchase and delivery to it near the said Town of Littleton, Colorado, to the said city gate at Cheyenne, Wyoming, is in interstate commerce.

Further answering said paragraph numbered III, this defendant denies each and every allegation therein contained, not herein specifically denied or admitted.

4. Answering said paragraph numbered IV, this defendant admits each and every allegation therein contained.

5. Answering paragraph numbered V, this defendant admits that the Cheyenne Light, Fuel & Power Company and this defendant are wholly-owned subsidiaries of Public Service Company of Colorado.

Further answering said paragraph numbered V, this defendant admits that Public Service Company of Colorado owns 15% of the common capital stock of Colorado Interstate Gas Company, and is a subsidiary of Cities Service Power & Light Company, a Delaware corporation.

Further answering said paragraph numbered V, this defendant alleges that with respect to each and every other allegation therein contained, this defendant has not and

cannot obtain sufficient knowledge or information upon which to base a belief.

6. Answering paragraph numbered VI, this defendant admits that the complainant and petitioner herein caused an investigation to be made of the rates charged by the Cheyenne Light, Fuel & Power Company in the year 1934, in a proceeding entitled "In re Investigation of the Gas Rates for the City of Cheyenne, Wyoming, of the Cheyenne Light, Fuel & Power Company and of the Gate Price Charged the Local Distributing Company by the Colorado-Wyoming Gas Company," being Docket No. 1680 of said Commission.

Further answering said paragraph numbered VI, this defendant alleges that, on, to-wit, the 3rd day of October, 1929, it made and entered into an agreement in writing with the defendant Colorado Interstate Gas Company, whereby and whereunder this defendant agreed to purchase, and the defendant Colorado Interstate Gas Company agreed to sell to this defendant, natural gas at the prices and upon the terms and conditions as therein provided. That thereafter and on, to-wit, the 8th day of October, 1929, said agreement of October 3, 1929, was amended by an agreement in writing whereby and whereunder certain modifications with respect to the prices to be paid by this defendant for natural gas, as therein provided, were made by and between this defendant and the defendant Colorado Interstate Gas Company. That during the pendency of said proceeding before the petitioner and complainant herein, in the year 1934, said agreement of October 3, 1929 (Exhibit "A") and said agreement of October 8, 1929 (Exhibit "B") were in full force and effect.

Further answering said paragraph numbered VI, this defendant alleges that on, to-wit, the 25th day of September, 1931, this defendant made and entered into an agreement in writing with the Cheyenne Light, Fuel & Power Company, whereby and whereunder this defendant agreed to sell, and the said Cheyenne Light, Fuel & Power Company agreed to purchase at wholesale from this defendant, natural gas at the prices and upon the terms and conditions as therein provided. That thereafter, and on, to-wit, the 24th day of August, 1934, said agreement of September 25, 1931, was amended by an agreement in writing whereby and where-

under certain modifications with respect to the prices to be paid by the said Cheyenne Light, Fuel & Power Company to this defendant for said natural gas as therein provided were made by and between this defendant and the said Cheyenne Light, Fuel & Power Company. That thereafter and on, to-wit, the 1st day of August, 1938, said amendatory agreement of September 25, 1931, was amended by an agreement in writing whereby and whereunder certain modifications with respect to the prices to be paid by the said Cheyenne Light, Fuel & Power Company to this defendant for said natural gas as therein provided were made by and between this defendant and the said Cheyenne Light, Fuel & Power Company. That attached hereto and made a part hereof by reference is a true and correct copy of said agreement of August 24, 1934, marked Exhibit "C", a true and correct copy of said amendatory agreement of September 25, 1931, marked Exhibit "D", and a true and correct copy of said amendatory agreement of August 1, 1938, marked Exhibit "E".

Further answering said paragraph numbered VI, this defendant alleges that said proceeding, being Docket No. 1680, before the Public Service Commission of the State of Wyoming resulted in a final order being entered by said Commission on, to-wit, the 18th day of August, 1934, whereunder a schedule of rates for natural gas to be distributed by the said Cheyenne Light, Fuel & Power Company to its consumers was ordered, fixed and promulgated, said order reciting and providing, inter alia, as follows:

"The above-entitled cause now coming on for final disposition after investigation and hearings, and agreed settlement between the Cheyenne Light, Fuel & Power Company and the Public Service Commission, it is ordered;"

(Note: Here follows prescribed rate schedules.)

"It further appears that the said company, having now fully complied with the terms of this order, this investigation and cause is hereby dismissed and the docket hereby closed.

"Dated at Cheyenne, Wyoming, this 18th day of August, 1934."

Further answering paragraph numbered VI, this defendant admits that the transportation by this defendant of natural gas from a point near the Town of Littleton in the State of Colorado to the city gate of the City of Cheyenne in the State of Wyoming was and is transportation in interstate commerce.

Further answering said paragraph numbered VI, this defendant denies each and every allegation therein contained not herein specifically admitted or denied.

7. Answering paragraph numbered VII, this defendant admits that the motion set forth in said paragraph numbered VII was duly adopted on the 9th day of December, 1938, by the complainant and petitioner herein. That as to whether or not said resolution was served upon the Cheyenne Light, Fuel & Power Company, this defendant does not have sufficient knowledge or information upon which to base a belief.

8. Answering paragraph VIII, this defendant alleges that it does not have and cannot obtain sufficient knowledge or information upon which to base a belief with respect to the allegations therein contained.

9. Answering paragraph numbered IX, this defendant denies that there is an interlocking stock ownership among and between all of the defendants herein; admits that this defendant is a subsidiary of Public Service Company of Colorado, a Colorado corporation, that Cheyenne Light, Fuel & Power Company likewise is a subsidiary of Public Service Company of Colorado, and that said Public Service Company of Colorado is a subsidiary of Cities Service Power & Light Company, a corporation of the State of Delaware, and that said Public Service Company of Colorado is the owner of an undivided minority interest consisting of 15% of the common capital stock of the defendant, Colorado Interstate Gas Company.

Further answering said paragraph numbered IX, this defendant alleges that it has at all times herein mentioned dealt and contracted with the other defendants herein independently and at arm's length; denies that this defendant has entered into any contracts with any of the other defendants pursuant to dictation from any of the other defendants herein, or dictated by any other person or corporation.

Further answering said paragraph numbered IX, this defendant denies each and every allegation therein contained not specifically herein admitted or denied.

Colorado Interstate Gas Company and Canadian River Gas Company each filed an answer (Documents Nos. 7 and 8 in the Transcript of the Record) to the Complaint of the Public Service Commission of Wyoming.

Order Instituting Investigation.

March 14, 1939.

In the Matter of Canadian River Gas Company, et al. Docket No. G-124.

It appearing to the Commission that:

(a) Canadian River Gas Company, a corporation organized and existing under the laws of the State of Delaware, engaged in the production, gathering, transportation, and distribution of natural gas, owns and operates a main transmission natural gas pipe line extending from gas fields in the Texas Panhandle, near Amarillo, Texas, to Clayton, New Mexico;

(b) Colorado-Interstate Gas Company, a corporation organized and existing under the laws of the State of Delaware, owns and operates a main transmission natural gas pipe line extending from Clayton, New Mexico, to the City of Denver, Colorado;

(c) Colorado-Wyoming Gas Company, a corporation organized and existing under the laws of the State of Delaware, owns and operates a main transmission natural gas pipe line extending from Littleton, Colorado, to Cheyenne, Wyoming;

(d) The main transmission natural gas pipe lines owned and operated by the Canadian River Gas Company, the Colorado-Interstate Gas Company, and Colorado-Wyoming Gas Company, as hereinbefore described, are so interconnected as to constitute, for the purposes of conducting an investigation, one continuous line extending from the Texas Panhandle, near Amarillo, Texas, to Cheyenne, Wyoming;

(e) Canadian River Gas Company, Colorado-Interstate Gas Company, and Colorado-Wyoming Gas Company are engaged in the transportation of natural gas in interstate commerce and the sale in interstate commerce of natural gas for resale for ultimate public consumption, for domestic, commercial, industrial, and other uses, and are, therefore, natural gas companies within the meaning of the Natural Gas Act;

(f) Pursuant to Section 4(c) of the Natural Gas Act and the Commission's Order No. 53, the Canadian River Gas Company on August 20, 1938, filed with the Commission its contracts and agreements covering the sale of natural gas to the Colorado-Interstate Gas Company and the Clayton Gas Company; the Colorado-Interstate Gas Company on August 19, 1938, filed with the Commission its contracts and agreements covering the sale of natural gas to the Public Service Company of Colorado, the Colorado-Wyoming Gas Company, the Pueblo Gas and Fuel Company, the City of Colorado Springs, the Citizens' Utilities Company, the Arkansas Valley Natural Gas Company, and the Natural Gas Pipe Line Company of America; the Colorado-Wyoming Gas Company on August 20, 1938, filed with the Commission its contracts and agreements with the Cheyenne Light, Fuel and Power Company;

(g) On December 22, 1938, the City and County of Denver, Colorado, a State Commission within the meaning of the Natural Gas Act, filed with the Commission a complaint (Docket No. G-118) alleging, among other things, that natural gas produced, gathered, and transported by the Canadian River Gas Company is delivered and sold to the Colorado-Interstate Gas Company; that this gas is transported, delivered, and sold by the Colorado-Interstate Gas Company to the Public Service Company of Colorado, a corporation organized and existing under the laws of the State of Colorado; that the Public Service Company of Colorado is a public utility engaged in the local distribution and sale of gas at retail to consumers in the City and County of Denver, Colorado, at rates which are greatly dependent upon the price paid by it to the Colorado-Interstate Gas Company; that the rates and charges for natural gas collected by the Colorado-Interstate Gas Company from the said Public Service Company of Colorado are unreasonable,

unjust, and discriminatory; that the Colorado-Interstate Gas Company sells natural gas at a much lower rate to other purchasers on both sides of the City gates of the City and County of Denver; said City and County of Denver petitions this Commission to investigate and determine the reasonable cost and charge for natural gas sold by the Colorado-Interstate Gas Company to the Public Service Company of Colorado at the Denver gate;

(h) On January 9, 1939, the Public Service Commission of the State of Wyoming, a State Commission within the meaning of the Natural Gas Act, filed with the Commission a petition (Docket No. G-121), reciting, among other things, that natural gas produced, gathered, and transported by the Canadian River Gas Company is delivered and sold to the Colorado-Interstate Gas Company; that this gas is transported, delivered, and sold by the Colorado-Interstate Gas Company to the Colorado-Wyoming Gas Company; that the Colorado-Wyoming Gas Company transports, delivers, and sells natural gas to the Cheyenne Light, Fuel and Power Company, which is a public utility engaged in the local distribution and sale of gas at retail to consumers in the City of Cheyenne, Wyoming; that the rates charged by the Cheyenne Light, Fuel and Power Company are dependent in a large measure upon prices which it pays to the Colorado-Wyoming Gas Company for natural gas; that the rates and charges for natural gas sold at the City gate by the Colorado-Wyoming Gas Company are unjust, unreasonable, and discriminatory, resulting in an excessively high cost to the consumers in the City of Cheyenne; that the said Public Service Commission of the State of Wyoming petitions this Commission to determine and fix a just and reasonable rate for gas sold to the Cheyenne Light, Fuel and Power Company at the City gates of Cheyenne, Wyoming;

Wherefore the Commission finds that:

It is necessary and proper, in the public interest, and to aid in the enforcement of the provisions of the Natural Gas Act, that an investigation be instituted by the Federal Power Commission, on its own motion, into and concerning all rates, charges, classifications, rules, regulations, practices, or contracts of the Canadian River Gas Company, Colorado-Interstate Gas Company, and Colorado-Wyoming Gas Company.

The Commission, on its own motion, orders that:

An investigation of the Canadian River Gas Company, Colorado-Interstate Gas Company, and Colorado-Wyoming Gas Company be and is hereby instituted for the purpose of enabling the Commission:

(1) To determine with respect to each of said companies whether in connection with any transportation or sale of natural gas subject to the jurisdiction of this Commission any rates, charges, or classifications demanded, observed, charged, or collected, or any rules, regulations, practices, or contracts affecting such rates, charges, or classifications are unjust, unreasonable, unduly discriminatory, or preferential; and

(2) If the Commission shall find that any such rates, charges, or classifications, rules, regulations, practices, or contracts are unjust, unreasonable, unduly discriminatory, or preferential, to determine and fix by appropriate order or orders just, reasonable, and non-discriminatory rates, charges, classifications, rules, regulations, practices, or contracts to be thereafter observed and enforced.

By the Commission.

LEON M. FUQUAY, Secretary.

Order of Consolidation for Purposes of Hearing.

September 13, 1940.

In the Matter of

Canadian River Gas Company, Colorado Interstate Gas Company and Colorado-Wyoming Gas Company. Docket No. G-124.

City and County of Denver, Colorado, Complainant v. Public Service Company of Colorado, et al. Defendants. Docket No. G-118.

Public Service Commission of Wyoming, Complainant v. Colorado-Wyoming Gas Company, et al, Defendants. Docket No. G-121.

It appearing to the Commission that:

(a) On December 22, 1938, the City and County of Denver, Colorado, a State Commission within the meaning of the Natural Gas Act, filed with the Commission a complaint (Docket No. G-118) alleging, among other matters, that natural gas produced and gathered in the State of Texas by the Canadian River Gas Company is transported by said company without the State of Texas and is then sold and delivered by it to its affiliate, the Colorado Interstate Gas Company, at a point near Clayton, New Mexico; that this gas is then transported by the Colorado Interstate Gas Company through the State of New Mexico and into the State of Colorado and that a large portion of such gas is then resold by said Colorado Interstate Gas Company to an affiliate, the Public Service Company of Colorado, at the City gate of Denver, Colorado; that the said Public Service Company of Colorado is a public utility engaged in the local distribution and sale of gas at retail to consumers in the City and County of Denver, Colorado, at rates which are greatly dependent upon the price paid by it to the Colorado Interstate Gas Company; that the rates and charges for natural gas collected by the Colorado Interstate Gas Company from the said Public Service Company of Colorado are unreasonable, unjust, and discriminatory; that the Colorado Interstate Gas Company sells natural gas at a much lower rate to other purchasers on both sides of the City gates of the City and County of Denver; and said City and County of Denver petitions this Commission to investigate and determine the reasonable cost and charge for natural gas sold by the Colorado Interstate Gas Company to the Public Service Company of Colorado at the Denver gate;

(b) On January 9, 1939, the Public Service Commission of the State of Wyoming, a State Commission within the meaning of the Natural Gas Act, filed with the Commission a petition (Docket No. G-121), reciting, among other things, that natural gas produced, gathered, and transported by the Canadian River Gas Company is delivered and sold by said company to the Colorado Interstate Gas Company; that this gas is then transported, sold and delivered by the Colorado Interstate Gas Company at Livingston, Colorado, to the Colorado-Wyoming Gas Company; that the Colorado-

Wyoming Gas Company transports such gas out of the State of Colorado and delivers and sells it at the City gate at Cheyenne, Wyoming, to the Cheyenne Light, Fuel and Power Company, a public utility engaged in the local distribution and sale of gas at retail to consumers in the said City of Cheyenne, Wyoming; that the rates charged by the Cheyenne Light, Fuel and Power Company are dependent in a large measure upon prices which it pays to the Colorado-Wyoming Gas Company for natural gas; that the rates and charges for natural gas sold at the City gate by the Colorado-Wyoming Gas Company are unjust, unreasonable, and discriminatory, resulting in an excessively high cost to the consumers in the City of Cheyenne; that the said Public Service Commission of the State of Wyoming petitions this Commission to determine and fix a just and reasonable rate for natural gas sold to the Cheyenne Light, Fuel and Power Company at the City gate of Cheyenne, Wyoming;

(c) On March 14, 1939, the Commission instituted an investigation (Docket No. G-124) of the Canadian River Gas Company, Colorado Interstate Gas Company and Colorado-Wyoming Gas Company, for the purpose of enabling the Commission (i) to determine with respect to each of said companies whether in connection with any transportation or sale of natural gas subject to the jurisdiction of this Commission any rates, charges, or classifications demanded, observed, charged or collected, or any rules, regulations, practices, or contracts affecting such rates, charges, or classifications are unjust, unreasonable, unduly discriminatory, or preferential; and (ii) if the Commission shall find that any such rates, charges, or classifications, rules, regulations, practices, or contracts are unjust, unreasonable, unduly discriminatory or preferential, to determine and fix by appropriate order or orders just, reasonable, and nondiscriminatory rates, charges, classifications, rules, regulations, practices, or contracts to be thereafter observed and enforced;

(d) Said order instituting an investigation was duly served upon the said Canadian River Gas Company, Colo-

rado Interstate Gas Company, and Colorado-Wyoming Gas Company;

The Commission orders that:

(A) Dockets Nos. G-118, G-121 and G-124 be and they are hereby consolidated for purposes of hearing thereon;

(B) A public hearing in these proceedings be held commencing on October 28, 1940, at 10 o'clock a. m. in the Circuit Court Room, Federal Building, in Denver, Colorado, and at said public hearing, pursuant to the provisions of Section 50.63 of the Provisional Rules of Practice and Regulations under the Natural Gas Act the order of procedure will be for the Canadian River Gas Company, the Colorado Interstate Gas Company and the Colorado-Wyoming Gas Company to open and close, and said opening shall consist in the presentation of their evidence relevant and material to the matters under the aforesaid investigation; and after said opening, the Federal Power Commission shall present its evidence, and thereafter, other participants may present their evidence; said order of procedure shall, however, be subject to such change or modification as the Examiner may find necessary or desirable;

(C) Interested State commissions may participate in the said hearing, as provided in Section 67.4 of the Provisional Rules of Practice and Regulations under the Natural Gas Act.

By the Commission.

LEON M. FUQUAY, Secretary.

Public Service Company of Colorado filed an answer (Document No. 3 in the Transcript of the Record), and entered its appearance (Transcript page 10) in the hearing before the Commission.

Opinion No. 73.

In the Matter of

Canadian River Gas Company, Colorado Interstate Gas Company and Colorado-Wyoming Gas Company. Docket No. G-124.

City and County of Denver, Colorado, Complainant v. Public Service Company of Colorado, et al, Defendants. Docket No. G-118.

Public Service Commission of Wyoming, Complainant v. Colorado-Wyoming Gas Company, et al, Defendants. Docket No. G-121.

By the Commission:

These proceedings are an outgrowth of an investigation instituted by the Commission on March 14, 1939, into the reasonableness of the rates and charges of the respondent companies, following the filing of petitions therefor by the City and County of Denver, Colorado, and by the Public Service Commission of Wyoming.

On April 12, 1939, Canadian River Gas Company[1] and Colorado Interstate Gas Company,[2] filed with the Commission an application for a rehearing and stay of said order of investigation; and on April 13, 1939, Colorado-Wyoming Gas Company[3] filed with the Commission a motion to set aside the same. On May 9, 1939, the Commission issued its order denying the application of the Canadian and Colorado Companies, and also entered a separate order denying the motion of the Wyoming Company.

On July 7, 1939, Canadian Company and Colorado Company filed their petition for review of the Commission's order of March 14, 1939, with the United States Circuit

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[1] Hereinafter sometimes referred to as "Canadian Company";

[2] Hereinafter sometimes referred to as "Colorado Company";

[3] Hereinafter sometimes referred to as "Wyoming Company."

Court of Appeals for the Tenth Circuit. The Commission thereupon filed its motion to dismiss the petition. The Circuit Court of Appeals, by its decision of March 4, 1940, directed a dismissal of the petition for review. The Companies' petition for rehearing was denied by the Court on July 24, 1940 (113 Fed. (2d) 1010); and certiorari was denied by the United States Supreme Court on October 28, 1940 (311 U. S. 693).

On September 13, 1940, the Commission consolidated these proceedings and ordered a public hearing to be held on October 28, 1940, in Denver, Colorado.

At the hearings, which consumed 102 hearing days, and closed on April 21, 1941, after one short recess, each of the respondent companies was afforded ample opportunity to and did present evidence. In addition, evidence was also offered by the City of Denver, Colorado, and by members of this Commission's staff. The transcript of the testimony in excess of 15,000 pages and over 300 exhibits clearly shows the extent and volume of the record.

Petition to Reopen Proceedings.

On March 11, 1942, Canadian and Colorado companies each filed a petition to reopen proceedings to take further evidence. Both petitions rely on the same general contentions for support. In the main these contentions are that taxes, wages and material costs have increased since the close of the proceedings and that additions to property have been greater than originally estimated. The Mayor of the City and County of Denver in a letter received March 17, 1942, and the Wyoming Public Service Commission in a telegram dated March 18, from its Chairman, have strenuously opposed granting of the petitions and the reopening of the proceedings. This Commission is fully aware of the recent trends in costs. It is also aware of the recent trends in revenues although no mention of revenues is made in the petitions. Due consideration has been given to these factors in the orders entered in these proceedings. That full account has been taken of the relevant contentions by the companies is apparent in the discussion of these factors in this opinion.

History and Operations of Companies.

The Canadian and Colorado Companies are separate corporate entities, but the properties of the two companies have, since their inception, been operated as a single enterprise. The incorporation of these two companies and the acquisition and construction of their properties were the result of a "Memorandum of Stipulations Agreed Upon Between Southwestern Development Company, Cities Service Company, and Standard Oil Company (N. J.)." The primary objectives of the undertaking were the production of natural gas in the Texas Panhandle field and its transportation to the city gate of Denver for sale to the Public Service Company of Colorado and for the supplying of natural gas to Colorado Fuel and Iron Corporation at Pueblo, Colorado, enroute to Denver. The obtaining of these two markets was the essential prerequisite of the construction of the Canadian Company-Colorado Company pipe line sometimes referred to as the "Denver" line.

As a part of its obligations under the aforesaid stipulation, Southwestern Development Company caused Canadian Company to be incorporated under the laws of the State of Delaware on February 24, 1928, with broad powers to carry on business in gas, oil and other extractive enterprises and qualified it to do business in the States of Texas, New Mexico, and Oklahoma. All of Canadian's capital stock, excepting directors' qualifying shares, was issued to Southwestern Development Company.

Also pursuant to the aforesaid stipulation, Colorado Company was incorporated under the laws of the State of Delaware on June 8, 1927, with broad powers to carry on business in natural gas, artificial gas, oils, and other extractive enterprises and qualified it to do business in the States of New Mexico, Oklahoma, and Colorado.

Canadian Company does not purchase any natural gas, but produces from its own wells all of its requirements. It holds gas rights under oil and gas leases on approximately 315,000 acres of land in the Texas Panhandle field and had in operation on December 31, 1939, a total of 94 gas wells.

Its gathering system consists of 144 miles of various sizes of pipe. It owns and operates a field compressing station near Fritch, Texas; the Bivins compressor station through which gas is transported to Clayton Junction approximately 35 miles north of the City of Amarillo, Texas; a gasoline extraction plant and a dehydration plant. The Canadian Company sells gas to the following affiliated companies: Amarillo Oil Company, Clayton Gas Company and Colorado Interstate Gas Company. Out of a total of about 46,000,000 MCF of gas sold for resale in 1939, approximately 41,000,000 MCF were sold to the Colorado Interstate Gas Company.

Canadian Company is engaged in the production, gathering, transportation, and sale of natural gas. It produces gas from its leaseholds in the Panhandle gas field in the State of Texas, gathers such gas in the field and after compressing it, (a) sells and transports in interstate commerce a portion of it through its main 22-inch transmission line, a distance of approximately 86 miles to a point in New Mexico known as Clayton Junction where the gas so transported is delivered to Colorado Company and to Clayton Gas Company, and (b) transports a portion of it through the facilities of Texoma Natural Gas Company to a point in Oklahoma known as Gray Junction where the gas so transported is also sold to Colorado Company.

The Canadian Company is obligated to supply the entire natural gas requirements of Colorado Company for a period of 20 years from and after the initial delivery of gas to Public Service Company of Colorado which was made on June 23, 1928, "and so long thereafter as seller has available for delivery to buyer hereunder quantities of natural gas which buyer determines are profitable for it to buy under the terms of this contract."

Construction of the main transmission line of Colorado Company was completed in June, 1928. The line begins at Clayton Junction, New Mexico, at the terminus of the transmission pipe line of the Canadian Company and extends in a northwesterly direction approximately 254 miles through New Mexico into the State of Colorado to the outskirts of the City of Denver, Colorado. The line con-

sists of 20-inch and 22-inch Dresser coupled steel pipe. Various laterals extend from the main line to customers of the company, including a 16-inch lateral to the plant of the Colorado Fuel and Iron Corporation near Pueblo, Colorado, and one near the terminus of the line at Denver, Colorado, for the purpose of making deliveries to Wyoming Company at a point near Littleton, Colorado. On December 31, 1939, Colorado Company owned and operated three compressing stations known as Clayton Station, Canyon Station, and Devine Station.

On October 15, 1931, Colorado Company and Natural Gas Pipeline Company of America entered into an agreement which provides for the sale by Colorado Company to the latter of 25 per cent of the total requirements of the latter company's pipe line having as its destination what is known as the "Chicago" market. The gas so purchased is produced by Canadian Company and transported from the field through the 24-inch main transmission line of Texoma Natural Gas Company (an affiliate of the Natural Gas Pipeline Company of America) from Fritch compressing station to Gray Junction, Oklahoma. Colorado Company does not own, lease, or operate any of the facilities utilized in connection with the delivery and sale of this gas.

The contract for the sale of gas to Wyoming Company was entered into October of 1929 and provides for the sale by Colorado Company to Wyoming Company of the latter's requirements of natural gas. The gas so purchased by Wyoming Company is transported by it through its transmission pipe line and resold to various industrials, public authorities, and distribution companies for resale in the States of Colorado and Wyoming.

The total volume of gas sold by the Colorado Company in 1939 was approximately 41,000,000 MCF. Of this total, about 20,000,000 MCF was sold to Natural Gas Pipeline Company of America. The two largest customers on the Denver line were Colorado Fuel and Iron Corporation, (about 7,000,000 MCF annually) and Public Service Company of Colorado, Denver city gate (about 6,000,000 MCF annually).

Wyoming Company was incorporated under the laws of

the State of Delaware in December of 1925 and is authorized to do business in the States of Colorado and Wyoming. The company's facilities consist of a natural gas transmission pipe line extending from a point near Littleton, Colorado, in a northerly direction and terminating at the city gate of Cheyenne, Wyoming, a distance of approximately 114 miles, as well as compressor stations and a number of laterals extending from the main line to various city gates and industrial plants in Colorado and Wyoming. At the inception of the project, natural gas was obtained from the Wellington gas field situated in Larimer County, Colorado. Until the latter part of the year 1929, its total requirements were obtained from this field. During the calendar year ending December 31, 1939, 98 percent of its total requirements were obtained from Colorado Company.

During the year 1939, Wyoming Company transported and sold a total of 2,860,000 MCF of natural gas. Of this total about 900,000 MCF was sold to its affiliate, Public Service Company of Colorado, for resale by that company through its distribution systems in a number of communities situated in northern Colorado. During the same year, Wyoming sold approximately 415,000 MCF to another affiliate, Cheyenne Light, Fuel and Power Company, for distribution in the City of Cheyenne. A total of 152,000 MCF[1] was sold for resale to the Greeley Gas and Fuel Company and Highway Gas Company. In addition to the above sales for resale, Wyoming Company, during the same period, sold a total of about 1,367,000 MCF[1] directly to ten industrial consumers located along its system in the State of Colorado and sold small quantities of gas to two United States Army posts.

Jurisdiction.

Canadian River and Colorado Interstate contend that they are not "natural-gas companies" within the meaning of the Natural Gas Act. The gist of these contentions has been considered before and rejected. Essentially, the contentions are: the business is private and not affected with a public interest; the contracts were entered into privately before the passage of the Natural Gas Act; and the companies have not held themselves out to serve the public

[1] At 14.4 lbs. plus 4 oz.

generally but engaged only in serving natural gas to a selected number of customers. In addition, Canadian River contends that so far as it is engaged in the production and gathering of natural gas, it is not subject to the jurisdiction of the Commission. Colorado-Wyoming concedes that its operations in selling gas in Wyoming which it receives at Littleton, Colorado, constitute it a "natural-gas company" under the Act, but it contends that the Commission has no jurisdiction over its transactions in Colorado.

The question of jurisdiction is one of fact and law. The facts are clear and admitted. All three companies are engaged in "the transportation of natural gas in interstate commerce" and in "the sale in interstate commerce of such gas for resale." It is clear therefore that the respondent companies are engaged in activities which make them natural-gas companies within the meaning of the Natural Gas Act.

In effect, respondents challenge the constitutionality of the Natural Gas Act on the grounds that it attempts the regulation of private business. The Commission is mindful of the fact that already in other cases, where similar contentions were made and similar circumstances existed, the courts have upheld the constitutionality of the act here involved.[1]

The particular contention of Canadian, that insofar as it is engaged in the production and gathering of natural gas it is not subject to the jurisdiction of the Commission, is unsound. Canadian's production and gathering operations are an integral part of its total operations, including transportation in interstate commerce and the sale of natural gas for resale in interstate commerce. Furthermore, Canadian's operations are an integral part of Colorado's operations and the two comprise a single operating system. The investigation of Canadian's production and gathering property and operations is indispensable in regulating

[1] Natural Gas Pipeline Company of America and Texoma Natural Gas Company v. Federal Power Commission and Illinois Commerce Commission, 120 Fed. (2d) 625 (C. C. A. 7th); Mississippi River Fuel Corporation v. Federal Power Commission, 121 Fed. (2d) 159 (C. C. A. 8th). See also Illinois Natural Gas Company v. Central Illinois Public Service Company and Illinois Commerce Commission (No. 100—October Term, 1941), 314 U. S. (decided January 5, 1942).

Canadian's rates and charges for the sale of natural gas in interstate commerce for resale and for the transportation of natural gas in interstate commerce.

The contention of Colorado-Wyoming is negatived by the decision in Illinois Natural Gas Company v. Central Illinois Public Service Company and Illinois Commerce Commission (No. 100, October Term, 1941), 314 U. S. ——, where the Supreme Court, in an extension case within the State of Illinois, said:

"In determining the scope of the federal power over the proposed extension of facilities and sale of gas it is unnecessary to scrutinize with meticulous care the physical characteristics of appellant's business, in order to ascertain whether, as the court below held, the interstate commerce involved in bringing the gas into the state ends before delivery to distributors. In any case the proposed extension of appellant's facilities is so intimately associated with the commerce and would so affect the volume moving into the state and distribution among the states as to be within the Congressional power to regulate those matters which materially affect interstate commerce, as well as the commerce itself." (Citing cases.)

Cost of Plant.

The record contains considerable evidence as to the cost and alleged value of the properties involved in the proceedings.

Canadian Company[1] and Colorado Company each introduced estimates of reproduction cost new less observed depreciation. They also introduced evidence as to the original cost of the property. Wyoming Company offered only "actual construction costs, less observed depreciation, plus working capital and additions to plant, now and immediately in course of construction." Commission staff restricted its plant studies to original cost and offered evidence of that character.

We have considered the estimates of reproduction cost new less observed depreciation submitted by the Canadian Company and the Colorado Company but conclude that they are too conjectural to have probative value, as they are

[1]Evidence confined to transmission facilities only.

not based upon established facts, and therefore, are subject to the vagaries of theories and imagination. We, therefore, turn to the evidence of original cost of the properties involved to determine whether it provides an adequate basis for the establishment of the proper rate base.

The properties are all of comparatively recent acquisition or construction. The accounting records have been sufficiently adequate and well maintained to permit a ready determination of all costs involved. The major portion of all cost of Canadian and Colorado Companies has been incurred since the adoption by these companies of an accounting system based on the Code of Accounts of the Pennsylvania Public Service Commission. Thus, the basic facts are clear and essentially undisputed. They represent the best and only reliable evidence as to property values. We find, therefore, in accordance with the provisions of Section 6 of the Natural Gas Act, and under the record in this proceeding, no necessity exists to consider other factors than original cost of the properties in service.

The differences between the amounts representing original cost claimed by the companies and allowed herein are all essentially differences in interpretation of the accounts or conclusions as to whether certain expenditures are legitimate items to be included in the cost of plant and hence in the rate base. A statement of the amounts claimed by each company and the amounts allowed herein follows:

	Original Cost (as of December 31, 1939)		
	Canadian Company	Colorado Company	Wyoming Company
Claimed by Company	$14,648,821	$14,670,749	$1,860,552[1]
Allowed herein	10,784,464	11,879,409	1,678,878
Difference	$ 3,864,357	$ 2,791,340	$ 181,674

The difference in the amounts above are large for the Canadian Company and the Colorado Company. However, they are accounted for principally by a comparatively few items,

[1]This figure is book cost. Company did not introduce an original cost study.

the decisions on which involve fundamental principles. These principles, which will be discussed later, relate to: (1) items formerly charged to expense (not through an accounting error) which the companies now seek to capitalize; (2) write-ups in plant accounts arising through transactions between affiliated interests; and (3) amounts paid to affiliated interests for entering into contracts. A few adjustments arise from a difference in determining the date when commercial operations first began and the balance of the items are comparatively minor adjustments and reclassifications.

A discussion of the principal items of difference between amounts claimed by the companies and those allowed herein follows.

Canadian Company

The difference of $3,864,357 between original cost claimed by Canadian Company ($14,648,821) and that allowed herein ($10,784,464) is composed of the following items:

(1)	Past expenses now capitalized	$ 129,032
(2)	Affiliated company profits	3,370,817
(3)	Interest during construction	366,507
(4)	Miscellaneous Adjustments	(1,999)
		$3,864,357

(1) Past Expenses now Capitalized. The amount of $129,032 represents an arbitrary adjustment for general construction cost—3½% for engineering and general and administrative overheads, plus 1% interest—on all net property additions from 1929 to 1939. It is the amount added to the book costs of the company to arrive at its claimed original cost. Whatever costs have been incurred for these purposes heretofore have been charged to operating expenses. The amount therefore represents reaccounting (not correction of an accounting error), for the charges were made in conformity with the established accounting policy of the Company in effect at the time.[1]

(2) Affiliated Company Profits. The total affiliated com-

[1]Peoples Gas Light and Coke Company v. Slattery, 373 Ill. 31 PUR (NS) 193, 206, 1939, and Los Angeles Gas and Electric Corporation, PUR 193 E. 317, 323.

pany profits of $3,370,817 are comprised of three items. First, a profit of $3,120,496 on the sale of property by Amarillo Oil Company to Canadian Company; second, a profit of $121,787 on the sale of property by Master Oil and Gas Company to Canadian Company; third, a profit of $128,534 on the sale of property by Mission Oil Company to Canadian Company through Amarillo Oil Company.

All these transactions represent payments by Canadian Company for properties acquired from affiliated interests in excess of their original cost. Amarillo Oil Company is 100% owned by Southwestern Development Company as is Canadian Company. Canadian Company paid Amarillo Oil Company $5,000,000 for its gas leaseholds and wells in the Texas Panhandle field. The original cost of these properties to Amarillo Oil Company was $1,879,504. In fact, the difference between these amounts, $3,120,496, or the "write-ups," was carried on the books of Canadian Company until 1939 as "appreciation."

Similarly, the transactions involving the second and third write-ups stated above were not at arm's length and prices paid for the properties exceeded the original cost to the party first devoting them to the public service by the amounts shown.

The principle involved which requires the elimination from property accounts of intercompany profits from transactions not at arm's length is so patent as to require no lengthy discussion. Any treatment which would permit the capitalization of such amounts would open the door to the renewal of past practices of the utility industry when properties were traded between affiliated interests at inflated prices with the expectation that the public would foot the bill.[1]

(3) Interest During Construction. The Company has recorded on its books a charge for "interest during construction" computed on the basis of a construction period extending from May 1, 1927, to October 31, 1928, and upon book costs including the amount of "write-ups" heretofore

[1]The Commission has steadfastly held such affiliated company profits will not be recognized. (Alabama Power Company, 1 F. P. C. R. 25, 39; Louisville Gas and Electric Company, 1 F. P. C. R. 130, 133; Northern States Power Company, 1 F. P. C. R. 329, 344.)

discussed.[1] Directing our discussion first to the construction period to be utilized for the purpose of the computation, we find that the project became available for commercial operation prior to the date fixed by Respondent. The record shows clearly that regular deliveries of natural gas to Colorado Fuel and Iron Corporation, Public Service Company of Colorado, at the Denver city gate, and others, commenced in the latter part of June 1928, and continued thereafter. Such fact has long been regarded as establishing definitely the beginning of commercial operations. We hold that the construction period ended July 1, 1928. Little discussion is required to dispose of the inclusion of "write-ups" in the book costs upon which "interest during construction" is charged.[2] It is obviously improper to attempt to build fictitious cost upon fictitious cost. Because of these two fundamental errors the books of the Company contain excessive charges for "interest during construction" in the amount of $366,507 and such amount is here disallowed.

(4) Miscellaneous Adjustments. The addition to plant of $1,999 is the net effect of a series of miscellaneous plant adjustments. No one of these adjustments is large, but they all represent accounting corrections or reclassifications that are necessary and proper.

In view of all the foregoing, the Commission finds that $10,784,464 is the original undepreciated cost of Canadian Company gas plant.

Colorado Company

The difference of $2,791,340 between original cost claimed by Colorado Company ($14,670,749) and that allowed herein ($11,879,409) is composed of three items:

(1)	Past expenses now capitalized	$ 440,050
(2)	Cost of contracts	2,352,940[2]
(3)	Miscellaneous Adjustments	(1,650)
		$2,791,340

[1] Item (2) supra.

[2] There is allowed in the rate base of Colorado Company the unamortized balance of a payment made to one Arthur K. Lee for certain contracts. The principal contract related to the sale of natural gas to the municipality of Colorado Springs, which contract was about to expire at the time of purchase. There is grave doubt as to the bona fides and propriety of the trans-

(1) This adjustment, $440,050, is similar to that made in connection with Canadian Company original cost and discussed hereinabove. It represents items previously charged to expense in accordance with good accounting principles. Therefore, a restatement of these items resulting in their inclusion as items of legitimate original cost cannot be allowed.

(2) The $2,352,940, consisting of two items ($2,000,000 and $352,940), represents the recorded value of stock payments made to Southwestern Development Company and to Cities Service Company for entering into contracts for the purchase of gas.

In order fully to understand these two items it is necessary to go back to the agreement which provided for the construction of the "Denver Line." This was a tri-partite agreement between the Southwestern Development Company, the Standard Oil Company (N.J.) and Cities Service Company. The salient features of the agreement important to this discussion were that Cities Service Company was to secure a satisfactory franchise in the City of Denver and, if successful, the corporation to be formed by Standard Oil Company (N.J.) (Colorado Company) was to sell natural gas to two subsidiaries of Cities Service—the Public Service Company of Colorado for distribution in Denver and to Pueblo Gas and Fuel Company for distribution in Pueblo, Colorado. Southwestern Development Company agreed to form a corporation (Canadian Company) for the purpose of acquiring the Amarillo Oil Company properties and to produce and transport the gas from the field to a point of connection with the transmission company (Colorado Company). Standard Oil Company (N.J.) agreed to form a corporation (Colorado Company) for the purpose of transporting the gas from point of delivery by Canadian Company to the above named and other markets. Pursuant to this agreement the Canadian Company and

action whereby Colorado Company acquired the contract. The record is inconclusive as to the necessity for making such an expenditure. Of the original amount of $236,666 the company has amortized $118,605 as of December 31, 1939. In view of the smallness of the item and the fact it will soon be completely amortized and thereby removed from the accounts, it is deemed preferable to allow it in the rate base rather than to reopen the record for further inquiry into its dubious nature.

Colorado Company came into being. The whole enterprise contemplated by the agreement became a reality.

Very strangely, it is now represented that Canadian Company refused to negotiate an agreement for the sale of gas by it to Colorado Company unless Colorado Company turned over to it 10,000 shares of preferred stock, having a total par value of $1,000,000, and 531,250 shares of no par common stock having a recorded value of $1,000,000. This $2,000,000 was recorded on the books of Colorado Company as cost of the gas purchase agreement. It is noted that the stock was actually issued to Canadian Company's nominee, the Southwestern Development Company.

The record clearly shows that the foregoing transaction resulted in an unjustified and fictitious increase of book cost of plant. In the tri-partite agreement the parent companies undertook to develop a mutually advantageous business enterprise by agreeing to create subsidiaries to carry the plan into effect. Pursuant thereto such subsidiaries were organized. It is now represented that one subsidiary, Canadian Company, refused to do what its parent had agreed upon unless it were paid $2,000,000. The Commission would be remiss in its duty if it required consumers to pay a return upon and amortize this payment.

The balance of the total amount of $2,352,940 is $352,940. This alleged cost is a result of issuing 187,500 shares of no par common stock to Cities Service Company, and is likewise no part of legitimate original cost. It is contended that this cost was incurred because Public Service Company of Colorado and Pueblo Gas and Fuel Company, subsidiaries of Cities Service Company, the latter a party to the tri-partite agreement, would not enter into purchase contracts without such payment being made to the parent company (Cities Service Company). The stock was issued to Cities Service Company but later, on December 29, 1931, Cities Service Company sold the stock to Public Service Company of Colorado for $10.00 a share, or $1,875,000.

(3) The addition to plant of $1,650, Miscellaneous Adjustments, is the net result of a number of minor reclassifications and corrections of accounting errors required by the record.

Wyoming Company

The difference, $42,236, between original cost claimed by the Wyoming Company of $1,721,114, and that allowed herein, $1,678,878, is comprised of the following items:

(1)	Interest capitalized on claimed non-utilized capacity	$27,475
(2)	Excessive interest during construction	7,574
(3)	Miscellaneous Adjustments	7,187
		$42,236

(1) This amount, $27,475, represents interest computed on a proportion of the total cost of the property south of Fort Collins, Colorado, estimated by the company to be in excess of that required to handle the business actually done during the period. This capitalization of a fictitious and arbitrary interest amount after the close of the construction period is clearly not justified. Interest ceases to be a cost of the original plant when commercial operations begin.

(2) This adjustment, $7,574, is necessary to restate interest during construction on the basis of simple interest at 6% per year applied to the adjusted monthly construction expenditures on each job for the period from the date of the initial expenditure to the date of operation or date ready for service.

(3) This total, $7,187, includes an adjustment of $5,715 for excessive construction overheads capitalized and $1,472 of miscellaneous adjustments, none of which can be treated as cost of plant.

Accrued and Annual Depletion, Depreciation and Amortization.

The determination of the annual allowances (annual expenses) for depletion, depreciation and amortization (sometimes referred to jointly as depreciation) and the accrued depreciation in the properties must be consistent. This is a simple statement of what should be regarded as a universal truth in the regulation of rates. It is so regarded by the overwhelming majority of regulatory authorities of the country, and by students and writers on the subject. It is

so regarded by sound business management outside of the utility rate case field.

But, the principle of consistency is flagrantly violated in the evidence introduced by the companies in this proceeding. The accrued depreciation used by the companies is based upon observed percent condition of the property, which in a large measure is merely observed deferred maintenance. (Accrued depletion as determined by Canadian Company is an exception. It is based on estimates of original and remaining reserves.) Under the observation theory a high observed percent condition and consequently a low existing accrued depreciation result for many items of plant right down to the instant before they suffer the breakdown or obsolescence requiring retirement.

However, even this theory, if carried out consistently, might be considered as having some elements of reasonableness. The small observed depreciation would find its counterpart in an equivalently small annual charge to operating expenses to cover the yearly added amount of observed depreciation. But, this is not done. Instead another theory is advanced by the companies as a basis for determining the annual charge to operating expenses. In determining expenses the physical aspects are neglected and the problem becomes one of determining the probable length of life of the enterprise—an economic aspect. The future always may be considered speculative and management can always be considered only reasonable if it conservatively judges the future. Thus, estimates of comparatively short life result. It then argues that the annual charges to expenses for depreciation (amortization of the investment) should be sufficient to amortize the remaining investment (cost new less observed depreciation) over the remaining short life of the enterprise. Thus, in calculating expenses, chargeable to the consumer, high depreciation charges are computed; in computing return to the company the opposite prevails, a small deduction from the cost of plant is computed.

The evidence of the Commission staff treats accrued and annual allowance for depreciation on a simple, consistent, and reasonable basis. It is the application of the service life principle. Property begins its inevitable march to re-

tirement the moment it is placed in service. Its total life in service can be reasonably estimated with due consideration given to such influencing factors as probable life of the enterprise, gas reserves, obsolescence and inadequacy. The annual charge to expenses should be the best possible measure of the total service value of that property used up in a year. The net accumulation of these annual charges is the best possible determination of the expired outlay, hence the best measure of the actual depreciation existing in the property as of that date.

In an attempt to justify the unreasonable inconsistency in method of determining annual and accrued depreciation, the companies argue that a distinction must be made before and after passage of the Natural Gas Act. This argument is without merit for depreciation accrues regardless of any statute. The companies, of course, accrued depreciation in their books prior to the passage of the Act. The reserve requirement deducted herein is far less than that actually accrued. A comparison of the book reserves for depreciation, with that used herein, as of December 31, 1939, follows:

	Depreciation Reserve—December 31, 1939		
	Canadian Company	Colorado Company	Wyoming Company
Per Books	$2,995,528	$4,994,352	$486,406
Per This Opinion	1,480,948	2,674,805	395,944

The above comparison clearly reveals that by adoption of the principles announced herein the reserve is less than the amounts now on the books of the companies. They are benefited to the extent of the differences.

Aside from the question of principles there remain two major questions which have a direct influence on both the accrued and annual depreciation. These are (1) natural gas reserves, and (2) probable length of life of the enterprise. The two questions are related and will be discussed jointly in the following section under "Gas Reserves."

Gas Reserves

Almost one-third of the 16,000 page record deals with testimony concerning the natural gas reserves in the Texas

Panhandle field and the remaining recoverable gas reserves of Canadian Company. For us to attempt specifically to discuss the many complex and involved questions pertaining to the remaining recoverable gas reserves of the field as a whole or of Canadian Company would serve only unduly to extend this opinion and cause to be treated at length a matter that, from the position it occupies in this proceeding, fails to warrant such extensive treatment. We have carefully considered all of the evidence of record and believe that the question can be resolved in relatively simple fashion.

Three estimates are of record for the field as a whole. The Company Witness Thompson gave it as his opinion that as of January 1, 1939, at an assumed abandonment pressure of 25 pounds, there could be recovered 9,532,027,596 MCF of gas at 16.4 pounds pressure base. The Company Witness Hughes gave it as his opinion that as of August 1, 1939, at an assumed abandonment pressure of 25 pounds, there could be recovered 8,840,132,111 MCF of gas at 16.4 pounds pressure. The Commission's staff Witness Hammer gave it as his opinion that as of August 1, 1939, at an assumed abandonment pressure of 25 pounds, there could be recovered 22,420,000,000 MCF of gas at 14.65 pounds pressure. In addition, the Witness Hammer upon the same basis estimates the recoverable reserve of Canadian Company to be 3,645,000,000 MCF.

We are convinced that, without adjustment, none of the foregoing estimates can be accepted as the amount of natural gas reasonably expected to be recovered from the Texas Panhandle field. It seems clear from the evidence that the Company's estimates are too low; the estimates of the Commission's staff too high. We reach that conclusion because estimates of the Company witnesses based on the "porosity sand thickness" method or "open flow" do not appear to have been founded on reliable or proper data. Further than that it appears that when adequate development of a field has been reached and satisfactory pressure and production data are available, such as is found to be the case in the Texas Panhandle field, the pressure decline method, when properly used, is to be desired over those methods used by the Company witnesses depending as they do solely upon matters of judgment.

The major criticisms made by Canadian Company of Commission staff estimates were: (1) the pressure decline method cannot be applied to the Texas Panhandle field, (2) the use of quadrants in applying the method was incorrect, (3) account was not taken of the migration of gas under Canadian's acreage, (4) a 25 pound abandonment pressure is too low, and (5) account was not taken of the early unmetered production in the field.

The pressure decline method is recognized as a satisfactory method of estimating gas reserves in a field that is depleted as much as 15% or more and where reliable pressure and production data are available. The Texas Panhandle field meets these qualifications. It is a well developed field and the pressure and production records maintained by the Texas Railroad Commission are adequate and satisfactory. The estimates of Canadian Company witnesses based on porosity, pay thicknesses and open flow were not founded on proper data and must be considered essentially unreliable.

The dispute concerning the accuracy of the mathematical result following the method used by Commission staff of dividing the entire field into quadrants and averaging these quadrants is not clearly resolved on the record. The Commission recognizes, however, that for the field as a whole the Commission staff arrives at an average of 15,400 MCF of remaining reserves per acre as compared with only 11,600 MCF of remaining reserves per acre under Canadian Company acreage. If the method of averaging of quadrants is incorrect, it certainly has favored the company position of lower reserves. The record shows that Canadian acreage is considered among the very best in the entire field.

The differences of opinion as to whether Commission staff estimate allowed for the migration of gas from Canadian Company acreage occupies considerable space on the record. The pressure decline method, theoretically, automatically accounts for any migration. If the iso-baric maps are properly drawn this factor is accounted for.

The Commission has considered Canadian Company's remaining criticisms of the Commission staff estimate, abandonment pressure and unmetered production. There are many factors which will influence the pressure at which

wells will be abandoned. The time of abandonment is so far in the future, however, that the answer at this time must be somewhat speculative. Similarly, any estimate of the amount of unmetered gas produced and wasted on the first years of the field must also be somewhat speculative.

After weighing all the pertinent facts of record and making due allowance for the criticisms of the estimate submitted by Commission staff, the Commission concludes that Canadian Company's remaining recoverable reserves, as of December 31, 1939, are not less than 2,800,000,000 MCF at 14.65 pounds pressure base and an abandonment pressure of approximately 50 pounds.

At the present and expected future rate of production of about 55,000,000 MCF a year, the 2,800,000,000 MCF of recoverable reserves will last 53 years. This determination, therefore, settles the last remaining question, that of the probable length of life of the enterprise. For purposes of applying the service life principle for depreciable property it is necessary to make certain that the life of the enterprise will exceed that of the longest life of any major unit of property. A life of 50 years, from 1928, or a remaining life, from December 31, 1939, of 38 years has been assigned to main line pipe. Thus, the remaining estimated 53 year life of reserves leaves an ample margin for a substantial increase in rate of production.

For purposes of depleting the cost of production plant the "production method" is used. Each MCF of gas produced carries with it a unit allowance for depletion expense. If the rate of production increases, the allowance for depletion increases proportionately. Thus, irrespective of the time within which the remaining reserves are used up, total investment in production facilities will be returned to the company in depletion expense allowances.

The Commission recognizes that an expected remaining life of 38 years for an extractive industry may be considered long. Canadian and Colorado Companies' contentions, however, that the business will be abandoned by 1956, or in 16 years from 1940, are not substantiated by any re-

liable evidence. The Commission takes note of the fact that the Texas Panhandle field and the adjacent Hugoton field are the largest known reservoirs of natural gas in the world. Natural-gas companies relying upon these fields, directly or indirectly, for their source of supply may be expected to continue in business for many years to come.

Parenthetically, it may be noted at this point that it makes little difference whether the service life principle based on the longer expected life, or the company's amortization principle based upon a 1956 expiration, is adopted. The net results as to excess earnings are substantially the same, provided consistency is maintained in computing the annual expense and the accrued depreciation and depletion reserve requirements. This result is a striking illustration of the fact that if consistency is followed in the treatment of accrued and annual depreciation or amortization reasonable results may be expected, almost irrespective of the method or theory adopted.

Conclusions as to Depreciation, Depletion and Amortization.

In view of the foregoing, the Commission adopts herein the service life principle for *determing* annual and accrued depreciation and the production method for determining annual and accrued depletion of production facilities, using 2,800,000,000 MCF as the remaining recoverable reserves as of December 31, 1939. No serious controversy arose over the estimated service lives used by the Commission staff for the various classes of property other than main line pipe.[1] These estimates stand as reasonable, and are adopted. Using these estimates of service lives, the 2,800,000,000 MCF of remaining recoverable reserves[2] and the plant costs adopted as set forth hereinabove, the following amounts

[1]The controversy on the estimated life of main line pipe was involved in the estimates of natural gas reserves and the remaining life of the enterprise.

[2]For purposes of depleting gas well construction costs the reserves under the wells, rather than those under the entire acreage were used. Based on the total 2,800,000,000 MCF these reserves were determined to be 1,724,000,000 MCF as of December 31, 1939. This is in accordance with the alternative method of depletion submitted in evidence by Commission staff.

are obtained as proper for annual depreciation, depletion and amortization expense and accrued depreciation, depletion and amortization.

	Canadian Company	Colorado Company	Wyoming Company
As of December 31, 1939			
Accrued Depletion	$ 653,681	$ —	$ —
Accrued Depreciation	1,480,948	2,674,805	395,944
Accrued Amortization	—	118,605	—
Total	$2,134,629	$2,793,410	$395,944
Year 1939			
Depletion Expense	$ 80,969	$ —	$ —
Depreciation Expense	157,774	268,305	38,280
Amortization Expense	—	13,890	—
Total	$ 238,743	$ 282,195	$ 38,280

The amortization shown above for Colorado Company covers the cost of the contract for the sale of gas to Colorado Springs. The amount of amortization accrued and the annual allowance are both in accordance with the present practice of Colorado Company in accounting for the total cost of $236,666.

Rate Base.

Two factors in addition to original cost and accrued depreciation must be considered before the rate base for each company can be determined. These are: (1) working capital and (2) allowance for property additions since December 31, 1939.

Working Capital

There is not a large difference between the working capital requirements determined by Commission staff and by the respective companies. Comparisons of these amounts are shown in the following table:

	Working Capital Requirements		
	Canadian Company	Colorado Company	Wyoming Company
Claimed by Company	$190,000	$120,000	$45,490
Commission Staff	150,738	109,065	16,235
Difference	$ 39,262	$ 10,935	$29,255

The differences shown are largely due to the inclusion by the companies of an allowance for minimum bank balances. These cash balances need not be provided for separately and were not included in the Commission staff estimates. The record is clear that delayed expense items, such as income taxes, provide ample funds for this purpose. Accordingly, the amounts determined as reasonable by Commission staff are adopted herein.

Property Additions

There is evidence in the record of probable future additions to plant for all three companies. A number of these additions, estimated at the time, have since been made. Allowance for these additions appears reasonable. Accordingly, an allowance for plant additions to December 31, 1941, is made herein. The allowances for the three companies are as follows:

	Additions Allowed 12/31/39 to 12/31/41
Canadian Company	$571,923
Colorado Company	337,000
Wyoming Company	78,813

It is contended that future additions beyond those of 1941 and as far as 1947 should be considered. At this time such probable future additions must still be considered speculative. Futhermore, in allowing the above additions without a concomitant deduction for additional depreciation and depletion reserves accumulated during the same years, the Commission is treating the companies more than fairly. The estimated reserve accruals for two years for

Colorado Company are larger than the above additions and Canadian Company's estimated reserve accruals for two years are almost as large as the above additions. For any long period of time reserve accruals will be larger than additions; hence the rate base would be lower if both items were considered. (After a natural-gas company has reached full commercial operations, the net investment—that is, cost less related reserves—tends to decrease with the lapse of time and with production.)

Contributions in Aid of Construction

Wyoming Company has on its books amounts, when properly classified, representing Contributions in Aid of Construction. The payments were made by customers for construction of certain facilities incident to service to such customers. The evidence is that the average balance of such amount was $12,183. The amount is no longer refundable. It represents no investment by Wyoming Company. Accordingly, the amount should be deducted from the plant costs here to be utilized as a rate base.

Going Value

The Wyoming Company contended that an amount of $175,000 should be added to cost of plant for going value. The amount is a judgment figure wholly unrelated to any costs or outlays. This Commission and regulatory agencies in general have consistently condemned the arbitrary additions to the rate base of such fictitious element of value. It is significant that neither Canadian Company nor Colorado Company introduced any such claim.

The amount claimed by Wyoming Company for going value is deemed unjustified and is not included in the rate base.

Conclusions as to Rate Bases.

There follows a summation of the rate base for each company based upon the conclusions reached herein as to each of the items involved.

	Canadian Company	Colorado Company	Wyoming Company
Original Cost as of Dec. 31, 1939	$10,784,464	$11,879,409	$1,678,878
Less: Accrued Depreciation, Depletion and Amortization	2,134,629	2,793,410	395,944
Depreciated Original Cost	$ 8,649,835	$ 9,085,999	$1,282,934
Plus Working Capital	150,738	109,065	16,235
Additions to Dec. 31, 1941	571,923	337,000	78,813
Less: Customer Contributions			(12,183)
Prudent Investment	$ 9,372,496	$ 9,532,064	$1,365,799

The Commission therefore adopts the foregoing prudent investment amounts as the rate base for each company.

Revenues and Expenses.

None of the companies offered in evidence a complete income statement for any period of its operations. Fragmentary sections thereof, such as revenues, operating expenses and taxes were presented separately, in numerous exhibits. Canadian Company's operating costs were stated in accordance with the terms of its contract with Colorado Company rather than on the basis of recognized principles of expense classification. Colorado Company showed revenues and expenses separately for the Denver line and the Texoma Natural Gas Company deliveries. Wyoming Company introduced an income statement but omitted therefrom all consideration of annual depreciation expense.

The only complete income statements are to be found in Commission staff exhibits. These exhibits contained a complete analysis covering each of the years, 1937, 1938 and 1939. Brief summary statements were also introduced for the twelve months ended September 30, 1940. A comparative analysis of these statements reveals little difference in the net operating results for 1939 compared with

either the three year average or the 12 months ended September 30, 1940.

The Commission is aware of the substantial increase in natural gas sales due to the country's war efforts. It also takes note of the increasing costs of operation. In the natural-gas industry, however, operating labor and materials are a comparatively small part of total costs. All factors considered, it may reasonably be expected that revenues will increase as rapidly, if not more rapidly, than costs for all three companies. Nevertheless, for purposes of this order, 1939 revenues and costs are considered to be representative of the relationship that will exist between these items in the immediate future. Prediction of future conditions, particularly under present emergency conditions, is beset with more than average difficulty. Use of 1939 figures, however, undoubtedly resolves most of the doubts as to future operation conditions in favor of the companies.

Operating revenues as reported by the companies and the staff are essentially in agreement. The staff adjusted revenues so as to state all deliverees and revenues on a calendar year basis. These adjustments are minor and are accepted as reasonable. The 1939 operating revenues adopted herein for each of the three companies follow:

	Operating Revenues 1939
Canadian Company	$2,393,387
Colorado Company	5,773,010
Wyoming Company	828,941

Depreciation and tax expenses will be considered along with operating expenses in the following discussion. The most important single item of expense concerning which a wide difference exists between Commission staff and each of the companies is the annual allowance for depreciation expense. This has been discussed fully hereinbefore and appropriate allowances determined.

Commission staff recommended a number of adjustments to operating expenses and taxes as found recorded on the books of the companies. In some cases they did

not adjust the items but suspended them for subsequent Commission decision. A brief discussion of the adjustments and suspensions found reasonable and adopted herein follows for each company.

Canadian Company

To the extent that any comparison is possible, there is only a small difference between operating expenses as shown in Canadian Company exhibits and as shown in Commission staff exhibits. But, as stated previously because of the fragmentary nature of Canadian Company's exhibits, it is necessary to deal with the Commission staff figures exclusively.

For 1939 Commission staff reported operating expenses, as adjusted, of $665,287 and before adjustments of $746,556. Almost the entire adjustments are concerned with residual operations expenses. With the exception of the adjustment of $11,722 in connection with the joint operations of the Texoma Natural Gas Company's Fritch gasoline plant and an item of $223 of non-recurring expense, the balance of the staff expense adjustments are found reasonable. Unless the balance of the adjustments are made, operating expenses are overstated by the amount thereof. As a result of the above changes to the staff adjusted amount of $665,287, operating expenses for 1939 are found to be $677,232.

A further deduction of $6,614 for delay rental expense is found necessary. This amount was included in expenses by Commission staff since an adjustment to the plant account was made of $151,591 for past delay rentals capitalized. This plant adjustment was not adopted herein and it is, therefore, necessary to deduct the amount of $6,614 from 1939 expenses. After deducting this amount, a balance of $670,618 is obtained for operating expenses.

To this amount for operating expenses of $670,618, two items must be added. First, exploration and development costs of $41,573 for 1939. Second, an allowance for rate case expense. Actual rate case expense for 1939 was suspended by Commission staff for Commission consideration. It is customary to amortize such expenses over a

period of 5 years, or more. Canadian Company in its exhibits claimed $41,000 a year for 5 years as necessary to cover its total costs. A close scrutiny of some of the rate case expenses might show certain expenditures as unreasonable charges against rate payers. For purposes of this order, however, the Commission adopts the full annual amount claimed by the company as well as the five year amortization period.

The addition of the above two items results in an amount of $753,191 as the 1939 operating expenses of Canadian Company, which amount is considered as reasonable.

The total taxes of Canadian Company for 1939, including Federal income taxes, were $177,162. Commission staff deducted an amount of $2,021 of Federal capital stock tax and suspended all Federal income tax of $66,403 for further consideration. The Commission staff deduction is not adopted and the suspension is also reinstated.

Commission staff suspended all Federal income taxes. This was done to call attention to the fact that a tax adjustment would be necessary if the Commission changed rates and, therefore, profits. The reduction in charges and consequent reduction in taxable income ordered hereinafter would result in a substantial decrease in income taxes at the 1939 rates. However, tax rates have increased over those of the past. Accordingly, the full amount of the 1939 income taxes of $66,403 are allowed herein and these together with increase in business are considered as fair estimates of the future as can now be made.

A summary of the operating revenue deductions for 1939 found proper and reasonable herein for Canadian Company follows:

Operation expense	$ 753,191
Depreciation expense	157,774
Depletion expense	80,969
Taxes	177,162
Total Revenue Deductions	$1,169,096

The deduction of this amount from the 1939 revenue of $2,393,387 leaves a balance of $1,224,291 as the 1939 income available for return.

Colorado Company

Again, for reasons hereinbefore set forth, it is necessary to deal exclusively with expenses as shown by Commission staff exhibits. Operating expenses, as adjusted, for 1939 were reported as $425,019, and before any adjustments, (but after reclassification to conform to the system of accounts), $432,643. These expenses are exclusive of the cost of purchased gas for 1939 of $2,112,951.

Commission staff adjustments to operating expenses consist chiefly of a deduction of $7,360 from transmission line maintenance. The evidence on record tends to support this deduction. However, for purposes of this order the operating expense of $432,643, as shown by the Colorado Company on its books, (reclassified) is adopted.

Adding to this operating expense of $432,643, and allowance for amortizing expenses in connection with these proceedings is considered reasonable. During 1939 Colorado Company reported expenses of $58,290 in connection with the rate case. These expenses were suspended by Commission staff for further consideration. In its evidence Colorado Company claimed an annual allowance of $43,000 for a five-year period to cover its total estimated expenses atributable to the rate case. This amount is accepted herein as the best estimate on record as to a proper allowance for rate case expense. The addition of this allowance to operating expenses of $432,643 results in a total allowance of $475,643.

Total taxes, including Federal and State income taxes, for 1939 were $637,641. Commission staff deducted an amount of $22,693, representing a portion of Federal capital stock tax as not properly includible in gas expense. Because of the general tax situation, the Commission allows this portion of capital stock tax as a proper charge.

Federal and State income taxes for 1939, included in the total taxes of $637,641, are $419,040. These income taxes were suspended by Commission staff for further consideration. For reasons given in discussing a similar item of expense of the Canadian Company, the item is allowed in full.

There is no controversy as to the 1939 actual cost of purchased gas for resale of $2,112,951.[1] This is the largest and predominating item of operating costs. The reasonableness of this charge made by Canadian Company is, of course, involved in this case. Any adjustment in Canadian Company rates and charges by order will result in an adjustment of this cost item.

A summary of the revenue reductions found proper and reasonable for the Colorado Company follows:

Operating expenses	$ 475,643
Cost of purchased gas	2,112,951
Depreciation expense	268,305
Amortization expense	13,890
Taxes	637,641
Total Revenue Deductions	$3,508,430

The deduction of this amount from the 1939 revenue of $5,773,010 leaves a balance of $2,264,580 as the 1939 income available for return.

Wyoming Company

Essentially the only difference between company and Commission staff statement of operating expenses is in the staff suspension of all rate case expense. During 1939, a total of $14,282 was reported as rate case expense. Wyoming Company's estimate of rate case expense for 1939, 1940 and 1941 totaled approximately $87,660. On the basis of amortizing this expense over a five-year period, an annual allowance of $17,500 is made.

Commission staff recommended deductions from operating expenses for 1939 of $2,579 are accepted. Included in this total is $1,657 representing expenditures for entertainment and donations not properly includible in operating expenses. The balance, $922, represents a series of minor adjustments.

Allowing the $17,500 for rate case expense and accepting the miscellaneous adjustments of $2,579 results in total

[1]Total gas purchased was $2,126,330. The difference, or $13,379, represents gas used in company operations and is included in operating expenses.

operating expenses for 1939 of $85,364. This amount is exclusive of the cost of purchased gas.

The 1939 cost of purchased gas, after adjustment to a calendar year basis, was $498,103. During the year the rate for purchased gas from Colorado Company increased from 20 cents per MCF to 22½ cents per MCF. The difference between the amount paid in 1939 and the cost for the full year 1939 on the 22½ cent rate is $23,120. Operating expenses have not been increased by this amount and need not be increased since the reasonableness of this 22½ cent rate of Colorado Company as well as its other rates for resale gas are under consideration in this proceeding. In the allocation of costs, discussed in the following section, appropriate consideration is given to this inter-relationship of revenues of the selling company and costs of the purchasing company.

As in the case of taxes for Canadian Company and Colorado Company, and for the same reasons set forth in the discussion thereof, Wyoming Company's actual taxes for the year 1939 are adopted herein. For 1939 the total taxes, including income taxes, were $57,106.

A summary of the operating revenue deductions for 1939 found proper and reasonable herein for Wyoming Company follows:

Operating expense	$ 85,364
Cost of gas purchased	498,103
Depreciation expense	38,280
Taxes	57,106
Total Revenue Deductions	$678,853

The deduction of this amount from the 1939 revenue of $828,941 leaves a balance of $150,088 as the 1939 income available for return.

Conclusions as to Income Available for Return.

For convenience, there follows a tabulation of the operating revenue, operating revenue deductions and resulting income available for return for the year 1939 for all companies:

	Canadian Company	Colorado Company	Wyoming Company
Operating Revenue	$2,393,387	$5,773,010	$828,941
Operating Revenue Deductions			
Operating expenses	$ 753,191	$ 475,643	$ 85,364
Cost of gas purchased		2,112,951	498,103
Depletion	80,969		
Depreciation	157,774	268,305	38,280
Amortization		13,890	
Taxes	177,162	637,641	57,106
Total Deductions	$1,169,096	$3,508,430	$678,853
Income available for return	$1,224,291	$2,264,580	$150,088

Rate of Return

There is no exact or fixed formula for determining a reasonable rate of return. In the final analysis the rate of return fixed must be the Commission's best judgment of what is fair, based on the evidence of record and guided by the basic facts required by law to be considered. These basic facts are best set forth in the opinion of the United States Supreme Court in Bluefield Waterworks & Improvement Company v. Public Service Commission of West Virginia, 262 U. S. 679. The requirements stated that consideration be given to the returns earned by like investments which are attended by corresponding risks and uncertainty in the same vicinity and over the same period of time are well known.

The record contains a great amount of testimony on rate of return. Four witnesses for the companies and one witness for Commission staff offered exhibits. Opinion of company witnesses indicates a fair rate of return to be not less than 8%. Evidence of Commission staff witness indicates a fair rate of return as not more than 6½%.

Commission staff exhibits contained complete and comprehensive studies of the history and trend of interest rates, stock yields, stability of earnings of public utilities and

other enterprises, general economic conditions and local conditions in the area of the market served. In addition, general statistics of the natural gas industry and present facts concerning the ownership, issuance, prices and yields of securities of natural gas pipe line companies, were introduced. Company witnesses relied primarily upon judgment or a far more limited study of financial experience of utilities, natural gas companies and other enterprises, both in the past and for the present. Nevertheless, the exhibits of practically all witnesses show that over-all returns are lower than before and that the returns being demanded by investors are among the lowest that have ever existed.

Canadian Company has a long-term, and essentially cost of service contract, with its affiliate, Colorado Company. Colorado and Wyoming Companies' sales are also principally to subsidiaries or affiliates and to stable markets. Colorado Company's principal industrial sale to Colorado Fuel and Iron Corporation is made to an affiliate. All these facts materially reduce basic business risks that might be present under other circumstances.

Parenthetically, one important difference exists between the circumstances in this case and in the Natural Gas Pipeline Company case. Due to the very large sales made to Colorado Fuel and Iron Corporation the proportion of Colorado's total industrial sales to its city gate sales for resale is very much larger than for Natural Gas Pipeline Company. Rates to such industrials are not subject to the jurisdiction of this Commission and are limited in a large measure by costs of competitive fuels, such as coal and oil. As it will be shown subsequently, a portion of the total earnings in excess of a fair rate of return of Colorado Company are properly allocable to these main line customers but no reduction in these rates is ordered. The amount of these earnings in excess of 6½% rate of return is approximately $131,000. If Colorado Company retains these earnings in excess of a 6½% rate of return on its sales to these customers, its rate of return on its entire business is increased to approximately 8% after placing into effect the reductions in rates ordered herein.

Evidence of record shows that the natural gas industry is now recognized as a major utility industry which has

passed its experimental and development period. It is now seasoned. Its securities are attractive to, and held in large amounts by institutional investors and recent financing has been at low interest rates. The Commission takes note of the fact that in 1940 Colorado Company refinanced its outstanding bonded indebtedness at an interest rate of 2¾%.

After consideration of all the testimony of record relating to the fixing of a fair rate of return, the Commission concludes that 6½%, on the bases herein found to be reasonable, is the maximum rate of return that can be considered fair in this case for all three companies.

The Supreme Court in its decision of March 16, 1942, in the case of Natural Gas Pipeline Company of America, et al. v. Federal Power Commission, fully supports this view.[1]

Conclusions as to Amount of Excessive Returns.

Application of this rate of return to the respective rate bases of each company as determined herein results in the amount of return considered as reasonable for each company. The following summary tabulation shows the rate base, income available for return, reasonable return (6½% on rate base) and excessive return for all three companies.

	Canadian Company	Colorado Company	Wyoming Company
1. Rate base	$9,375,000	$9,535,000	$1,366,000
2. Income available for return	1,224,291	2,264.580	150,088
3. 6½% on rate base	609,375	619,775	88,790
4. Excessive returns (2 minus 3)	614,916	1,644,805	61,298

[1]In its discussion of "Fair Rate of Return" in that case, the court states:

"'The Commission found that '6½ per cent is a fair annual rate of return upon the rate base allowed', which it had characterized as 'a generous allowance'. The courts are required to accept the Commission's findings if they are supported by substantial evidence. §19(b). We cannot say on this record that the Commission was bound to allow a higher rate.

* * * *

"The business is in the same position as other similar businesses with respect to increased taxation, inflation and costs of operation. Other factors such as credit risks, risks of technological changes, varying demands for product, relatively small labor requirements, and conversion of inventory into cash compare more favorably. After a full consideration of all of these factors and of expert testimony, the Commission concluded that the prescribed reduction in revenues was just and reasonable, and that the 6½% was a fair rate of return."

Allocation of Costs.

It is readily apparent that the foregoing determination of earnings in excess of a reasonable return, by Companies, is based upon all the components of a rate case; in effect at the time, specifically applicable to each of the Companies as separate operating entities. This has been necessary because there are present in the proceedings three separate and distinct rate cases.

However, to stop there is to ignore realities. The entire project, although involving facilities of three corporate entities, is, for all practical purposes, a single project now designed to produce, gather, transmit and sell natural gas from the Texas Panhandle field to consumers along the line as far north as Cheyenne, Wyoming. The operation of the project is such that it is impossible, for example, to alter the rates of Canadian Company without simultaneously affecting the reasonableness of the rates of Colorado Company. Likewise the rates of Colorado Company cannot be altered without affecting the rates of the Wyoming Company.

Accordingly, if the rate-payer is to receive all to which he is justly entitled, we are compelled to determine Colorado Company's proportionate share of the reduction ordered for Canadian Company in the sum of $614,916 and to cause that amount plus the excess earnings of Colorado Company in the sum of $1,644,805 to be passed on to its customers. In turn the rates of Wyoming Company must be revised downward to reflect the saving in gas purchased as a result of the foregoing plus its previously determined excess earnings in the amount of $61,298. The orders that we adopt will be designed to accomplish that result.

The Commission is aware that in an investigation such as this it is incumbent on it to determine the reasonableness or unreasonableness of the rates and charges subject to its jurisdiction. This requires that the total costs of operations, including depreciation, taxes and a fair return, be distributed among the various customers served, individually or by appropriate groups. To the extent that such costs allocated to sales under the Commissioner's jurisdiction are less than revenues received, the rates and charges made are

unjust and unreasonable, and revenues must be reduced accordingly.

It does not follow, from this obligation of the Commission, that an allocation of physical property or portions thereon, must be made, before any excessive returns are determined, as seems to be the contention of the companies. In fact, the fragmentary presentation by the companies of revenues and expenses particularly, is rooted in the attempt to make property allocations first and as a starting point for all subsequent exhibits and testimony. Nowhere in the entire evidence submitted by Canadian and Colorado Companies is there a complete presentation of the entire operations of the company broken down between jurisdictional and non-jurisdictional operations.

All that can be accomplished by an allocation of physical properties can be attained by allocating costs including the return. The latter method is by far the most practical and business-like.

Canadian and Colorado Companies submitted a number of so-called allocation studies. Each is premised on a different theory or principle, and starts with the Denver line as distinct from other operations. These theories varied from assuming a field price for gas as the prevailing market price, to the construction and operation of a separate line for city gate resale deliveries only. For the most part the assumptions made either do not square with realities or are patently unreasonable as applied to properties and operating conditions such as those concerned.

Commission staff exhibits on cost allocation followed principles that have long been recognized as reasonable in the public utility field and are widely accepted. Therein costs are divided essentially into two groups, fixed and variable. Fixed costs are largely joint costs which do not vary with volume of sales. The total amount of such costs are largely proportional to the maximum demand on the system or system capacity. Accordingly, these costs have been allocated basically in proportion to each customer's responsibility for the peak day demand. Variable costs are largely those that vary proportional to output or volume of sale. Accordingly, these costs have been allocated in proportion to volume of gas purchased by each customer.

The principles and methods of cost allocation presented by Commission staff are obviously the most appropriate and reasonable for Canadian and Colorado Companies. Applying the physical and operating data submitted in evidence by Commission staff to total costs for each company results in the allocations shown in the following table. The total cost of service for Colorado Company is the amount found reasonable herein except for purchased gas. The actual cost of gas purchased from Canadian Company of $2,126,000 is eliminated and there is substituted the proper allocated cost of $1,575,000. This is a reduction of $551,000. This amount added to the excess returns of $1,645,000, based on the present cost of gas, makes a total of $2,196,000 as the new excess earnings over 6½% rate of return.

Canadian Company.			
Customers	Revenue	Allocated Costs	Excess Revenue Over Costs
Colorado Company	$2,126,000	$1,575,000	$ 551,000
Clayton Gas Company	25,000	15,000	10,000
Amarillo Oil Company	205,000	152,000	53,000
Company Use	29,000	28,000	1,000
Total	$2,385,000	$1,770,000	$ 615,000
Miscellaneous Operating Revenues	8,000	8,000	—
Total	$2,393,000	$1,778,000	$ 615,000

Colorado Company.			
Customers	Revenue	Allocated Costs	Excess Revenue Over Costs
Direct Industrial Sales	$1,277,000	$1,162,000	$ 115,000
Sales to Public Authorities	49,000	33,000	16,000
Sales to Other Gas Utilities	3,062,000	1,652,000	1,410,000
Natural Gas Pipeline Company	1,376,000	721,000	655,000
Total	$5,764,000	$3,568,000	$2,196,000
Miscellaneous Operating Revenues	9,000	9,000	—
Total	$5,773,000	$3,577,000	$2,196,000

Canadian Company sales to Colorado Company and to Clayton Gas Company are made under rate schedules on file with the Commission, FPC Rate Schedules Nos. 1 and 2, respectively, and are under its jurisdiction. As indicated above, revenues from these sales exceed the costs of $561,000. Accordingly, the Commission finds the Canadian Company's rates and charges under its FPC Rate Schedules Nos. 1 and 2 unjust and unreasonable and by order hereinafter entered requires the company to reduce its rates and charges by that amount.

All Colorado Company sales classified as "Sales to Other Gas Utilities" and its sales to Natural Gas Pipeline Company are made under rate schedules on file with the Commission, and are under its jurisdiction. As indicated above, total revenues from these sales exceed costs by $2,065,000. A distribution of this total between resale customers and to Natural Gas Pipeline Company is shown in the attached Exhibit A. Accordingly, the Commission finds the Colorado Company's rates and charges under its Rate Schedules Nos. 1, 2, 3, 4, 5, 6, 7, 8, and 9 unjust and unreasonable and by order hereinafter entered requires the company to reduce these rates and charges by the amount of $2,065,000 annually.

Colorado-Wyoming Gas Company.

In preparing its allocation of costs for Wyoming Company, Commission staff departed from the use of the system peak day for allocating demand (fixed) costs and combined the separate class peaks of resale customers and of main line industrial customers. This method is commonly used, but under the particular circumstances surrounding the deliveries of gas to the industrial customers involved, a variation from that method as hereinafter set forth would be in keeping with the Company's operations. The Colorado Portland Cement Company, the principal main line industrial user, is curtailed regularly during system peak days. Its demand on the system peak day is, in our opinion, a proper measure of its proportionate share of demand costs than its highest off-peak demand. Accordingly, the principles and methods of cost allocation presented by Commission staff are adopted with the modification that the coincident demands of all customers on the system peak

day are used, and with exception of deliveries to Highway Gas Company.

Deliveries to Highway Gas Company are for all practical purposes an exchange of gas with Goodstein Pipeline Company. The total amount of revenue involved is less than $700 per year. In view of these facts no attempt was made to make a special cost study and costs have been assumed to equal revenues.

The total costs of Wyoming Company to be allocated are those found reasonable herein with the exception of the cost of purchased gas. As shown in Exhibit A attached, the charges made by Colorado Company to Wyoming Company exceed costs by $98,000. A reduction of this amount ordered herein reduces Wyoming Company's total costs (including return) from $768,000 to $670,000 and increases the amount of excess returns as shown in the previous section on "Rate of Return" from $61,000 to $159,000.

A summary of the results of this allocation of costs follows:

	Revenue	Allocated Costs	Excess Revenue Over Cost
Direct Industrial Sales	$ 236,000	$ 201,000	$ 35,000
Sales to Public Authorities	11,000	6,000	5,000
Sales to Other Gas Utilities	582,000	463,000	119,000
	$ 829,000	$ 670,000	$ 159,000

All Wyoming Company "Sales to Other Gas Utilities" are made under rate schedules on file with this Commission and are under its jurisdiction. As indicated above a total revenue from these sales exceed costs by $119,000. The balance of the excess revenues (allocated to other customers) is $40,000 which if not passed on in rate reductions will increase the overall rate of return earned by Wyoming Company from 6½% to approximately 9½%.

The amount of the reduction in charges determined above are materially dependent upon the reduction in charges of Colorado Company to Wyoming Company. The Commission

order entered herein grants Wyoming Company 30 days from and after the effective date of the new rates required to be filed by Colorado Company for the filing of its own ordered reduced rates.

The Commission finds Wyoming Company's rates and charges under its FPC Rate Schedule Nos. 1, 2, 3, 4, and 5 unjust and unreasonable and, by order hereinafter entered, requires the company to reduce these rates and charges by the amount of $119,000 annually.

Appropriate orders will be entered in conformity with this opinion.

Dated at Washington, D. C., this 18th day of March, 1942.

Exhibit A. Docket G-124. Opinion No. 73.
Colorado Interstate Gas Company
Allocated Cost of Service
Sales to Other Gas Utilities and to Pipe Line Companies 1939

Name of Customer	F.P.C. Rate Schedule No.	MCF at 14.65 Pounds	Revenue	Allocated Cost	Excess Revenue Over Cost	Average Revenue ¢/MCF	Average Cost ¢/MCF
Sales to Other Gas Utilities							
The Arkansas Valley Natural Gas Company	7	15,564	$ 3,000	$ 3,000	$ —	19.3	19.3
Citizens Utilities Company	4, 6, 9	181,017	68,000	44,000	24,000	37.6	24.3
City of Colorado Springs	5	805,981	213,000	107,000	106,000	26.4	13.3
Colorado-Wyoming Gas Company	3	2,867,649	495,000	397,000	98,000	17.3	13.8
The Pueblo Gas and Fuel Company	2	452,992	158,000	74,000	84,000	34.9	16.3
Public Service Company of Colorado	1	6,650,953	2,125,000	1,027,000	1,098,000	32.0	15.4
Total Other Gas Utilities		10,974,156	$3,062,000	$1,652,000	$1,410,000	27.9	15.1
Natural Gas Pipeline Company of America	8	20,367,632	1,376,000	721,000	655,000	6.8	3.5
Total		31,341,788	$4,438,000	$2,373,000	$2,065,000	—	—

Exhibit B. Docket G-124. Opinion No. 73.
Colorado-Wyoming Gas Company
Allocated Cost of Service
Sales to Other Gas Utilities 1939

Name of Customer	F.P.C. Rate Schedule No.	MCF at 14.65 Pounds	Revenue	Allocated Cost of Service	Excess Revenue Over Cost	Average Revenue ¢/MCF	Average Cost ¢/MCF
Cheyenne Light, Fuel and Power Co.	1; 2	414,807	$ 182,000	$ 124,000	$ 58,000	43.9	29.9
Public Service Company of Colorado	3	900,114	335,000	294,000	41,000	37.2	32.7
Greeley Gas and Fuel Co.	4	147,406	64,000	44,000	20,000	43.4	29.8
Highway Gas Company	5	4,649	700	700	—	15.1	15.1
Total		1,466,976	$ 581,700	$ 462,700	$ 119,000	39.7	31.5

Order Reducing Rates, Canadian River Gas Company.

Upon consideration of the orders previously issued in these proceedings, the evidence of record, the briefs and petition filed, and the Commission having on this date issued Opinion No. 73, which is hereby incorporated and made a part hereof;

The Commission finds that:

(1) The Canadian River Gas Company (hereinafter referred to as Canadian Company), a Delaware corporation, owns and operates facilities for the production, gathering, transportation and sale of natural gas for resale in interstate commerce, and is a "natural-gas company" within the meaning of the Natural Gas Act. It produces gas from its leaseholds in the Panhandle field in the State of Texas, gathers such gas in the field and, (a) transports a portion of it through its main 22" line a distance of approximately 86 miles to a point in New Mexico known as Clayton Junction where the gas so transported is sold for resale to Colorado Interstate Gas Company and Clayton Gas Company, and (b) transports a portion of it through the facilities of Texoma Natural Gas Company to a point in Oklahoma known as Gray Junction where the gas so transported is also sold for resale to Colorado Interstate Gas Company;

(2) A substantial portion of the natural gas sold to Colorado Interstate Gas Company (hereinafter referred to as Colorado Company) at Clayton Junction is transported by Colorado Company 254 miles to the environs of Denver, Colorado, for sale to Public Service Company of Colorado and to Colorado-Wyoming Gas Company; the entire system from the Panhandle field to Denver, Colorado, is operated as a single property and is commonly referred to as the "Denver Line." A substantial portion of the natural gas delivered at Gray Junction in Oklahoma is further transported through the facilities of Natural Gas Pipeline Company of America and Chicago District Pipeline Company to Chicago, Illinois;

(3) Natural gas sales to Colorado Company and to Clayton Gas Company are sales for resale in interstate commerce and are made under rate schedules on file with this Commission and designated as Canadian River Gas Company

FPC Rate Schedules Nos. 1 and 2, respectively. The rates and charges, demanded, observed, charged, and collected by Canadian Company for the transportation and sale of natural gas for resale under its FPC Rate Schedules Nos. 1 and 2, together with all rules, regulations, practices, and contracts, affecting such rates and charges, are subject to the jurisdiction of this Commission;

(4) The original undepreciated cost of Canadian Company's gas plant as of December 31, 1939, is $10,784,464;

(5) The remaining recoverable gas reserves of Canadian Company, as of December 31, 1939, are not less than 2,800,000,000 MCF at 14.65 pounds per square inch absolute pressure and an abandonment pressure of approximately 50 pounds per square inch; at the present and expected future rate of production these reserves will last in excess of 50 years;

(6) The production method is the most suited, for purposes of these proceedings, for determining annual and accrued (existing) depletion of gas leaseholds and gas well intangible costs; using the above determined recoverable gas reserves and the production method, an annual depletion expense of $80,969 and an accrued depletion, as of December 31, 1939, of $653,681 are determined as reasonable and proper;

(7) The service life principle is proper, for purposes of these proceedings, for determining annual and accrued (existing) depreciation of transmission facilities and all property other than gas leaseholds and gas well intangible costs; using this principle an annual depreciation expense of $157,774 and an accrued depreciation, as of December 31, 1939, of $1,480,948, are determined as reasonable and proper;

(8) The amount of $8,649,835 (original cost of $10,784,464 less accrued depletion of $653,681 and accrued depreciation of $1,480,948), is the depreciated original cost of Canadian Company's gas plant as of December 31, 1939;

(9) An allowance of $571,923 for additions to property from December 31, 1939, to December 31, 1941, and of $150,738 for working capital are sufficient and reasonable; these allowances added to the depreciated original cost

result in an amount of $9,372,496 (accepted as $9,375,000) as the proper prudent investment rate base upon which Canadian Company is entitled to earn a fair rate of return;

(10) An annual rate of return of 6½ percent on the rate base of $9,375,000, or $609,375 is a fair and reasonable return to Canadian Company;

(11) Reasonable and proper allowances for operating expenses, including an allowance for amortizing rate case expense over a five-year period, depletion, depreciation, and all taxes are as follows:

Operating expenses	$ 753,191
Depletion expense	80,969
Depreciation expense	157,774
Taxes	177,162
	$1,169,096

(12) The total allowable cost of all services of Canadian Company is $1,169,096 plus $609,375 for a fair return or $1,778,471; a proper allocation of this total cost and its relationship to revenues for 1939 for sales to Colorado Company, Clayton Gas Company, and all others follows:

Customer	Revenue	Allocated Costs	Excess Revenue Over Costs
Colorado Company	$2,126,000	$1,575,000	$ 551,000
Clayton Gas Company	25,000	15,000	10,000
All Other Sales	242,000	188,000	54,000
Total	$2,393,000	$1,778,000	$ 615,000

(13) Therefore, the rates and charges made, demanded, and received by Canadian Company for and in connection with the transmission and sale of natural gas for resale in interstate commerce to Colorado Company and Clayton Gas Company are unjust, unreasonable, and excessive to the extent of $561,000 per year;

(14) The rates and charges made, demanded, and received by Canadian Company, after reflecting the reductions hereinafter ordered, will be just and reasonable;

Therefore, the Commission orders that:

(A) The petition of Canadian River Gas Company to reopen these proceedings for the purpose of taking further evidence be and the same is denied;

(B) The rates and charges made, demanded, or received by Canadian River Gas Company for the transportation and sale of natural gas for resale to Colorado Interstate Gas Company under its FPC Rate Schedule No. 1 shall be reduced by not less than $551,000 per year;

(C) The rates and charges made, demanded, or received by Canadian River Gas Company for the transportation and sale of natural gas for resale to Clayton Gas Company under its FPC Rate Schedule No. 2 shall be reduced by not less than $10,000 per year;

(D) Canadian River Gas Company shall file on or before April 25, 1942, new schedules of rates and charges for or in connection with the transportation and sale of natural gas in interstate commerce for resale to reflect the reductions ordered in paragraphs (B) and (C) above, which new schedules of rates and charges shall be effective as to all bills regularly rendered on and after May 15, 1942;

(E) The Commission reserves the right to reject all or any part of such new schedules and in lieu thereof to prescribe the same by further order;

(F) On and after the effective date of the new schedules of rates and charges filed and made effective in accordance with paragraph (D) above, Canadian River Gas Company shall cease and desist from making, demanding, or receiving any rates and charges which do not reflect the reductions ordered in paragraphs (B) and (C) above.

Order Reducing Rates, Colorado Interstate Gas Company

Upon consideration of the orders previously issued in these proceedings, the evidence of record, the briefs and petition filed, and the Commission having on this date issued Opinion No. 73, which is hereby incorporated by reference and made a part hereof:

The Commission finds that:

(1) Colorado Interstate Gas Company (hereinafter referred to as Colorado Company), a Delaware corporation, owns and operates facilities for the transportation and sale of natural gas for resale in interstate commerce, and is a "natural-gas company" within the meaning of the Natural Gas Act. It transports gas from Clayton Junction, New Mexico, at the terminus of the transmission pipe line of Canadian River Gas Company (hereinafter referred to as Canadian Company), through its main line consisting of 20" and 22" steel pipe, a distance of 254 miles through New Mexico into the State of Colorado to the outskirts of the City of Denver, Colorado. Sales are made along the line to gas utilities and industrial customers and to Public Service Company of Colorado and Colorado-Wyoming Gas Company at the terminus of the line. Sales are made to the Natural Gas Pipeline Company of America at Gray Junction, Oklahoma, at the point of receipt of the natural gas from Canadian Company;

(2) The entire natural gas requirements of Colorado Company are obtained from its affiliate, Canadian Company; the systems of the two companies are operated as a single property;

(3) Natural gas sales to The Arkansas Valley Natural Gas Company, Citizens Utilities Company, City of Colorado Springs, Colorado-Wyoming Gas Company, The Pueblo Gas and Fuel Company, Public Service Company of Colorado, and Natural Gas Pipeline Company of America are made under rate schedules on file with this Commission and designated as Colorado Interstate Gas Company FPC Rate Schedules Nos. 1 to 9, inclusive. The rates and charges demanded, observed, charged, and collected by Colorado Company for the transportation and sale of natural gas for resale under FPC Rate Schedules Nos. 1 to 9, inclusive, together with all rules, regulations, practices, and contracts affecting such rates and charges, are subject to the jurisdiction of this Commission;

(4) The original undepreciated cost of Colorado Company's gas plant as of December 31, 1939, is $11,879,409;

(5) The amount of $2,874,805 for accrued depreciation in

the property of the Colorado Company as of December 31, 1939, is the best possible estimate of the actual depreciation as of that date and is reasonable. The amount of $118,605, being Colorado Company's accrued amortization as of December 31, 1939, for the cost of the Colorado Springs gas sales contract, is reasonable;

(6) The amount of $9,085,999 (original cost of $11,879,409 less accrued depreciation of $2,674,805 and accrued amortization of $118,605), is the depreciated original cost of Colorado Company's gas plant as of December 31, 1939;

(7) An allowance of $337,000 for additions to property from December 31, 1939, to December 31, 1941, and of $109,065 for working capital are sufficient and reasonable; these allowances added to the depreciated original cost result in an amount of $9,532,064 (accepted as $9,535,000), as the proper prudent investment rate base upon which Colorado Company is entitled to earn a fair rate of return;

(8) An annual rate of return of 6½ percent on the rate base of $9,535,000, or $619,775 is a fair and reasonable return to Colorado Company;

(9) Reasonable and proper allowance for operating expenses, including an allowance for amortizing rate case expenses over a five-year period, cost of purchased gas, depreciation, amortization and all taxes are as follows:

Operating expenses	$ 475,643
Cost of purchased gas	2,112,951
Depreciation expense	268,305
Amortization expense	13,890
Taxes	637,641
Total	$3,508,430

(10) By order entered in these proceedings, as of this date, against Canadian Company, the above cost of purchased gas has been reduced by $551,000 annually, thereby reducing the total in paragraph (9) above to $2,957,430;

(11) The total cost of all services of Colorado Company is the sum of the costs in paragraph (10) above of $2,957,430 and $619,775 for a fair return, or $3,577,205; of this total $2,373,000 is properly and reasonably allocated to sales made under FPC Rate Schedules Nos. 1 and 9, inclusive;

(12) The total revenues for 1939 under Rate Schedules Nos. 1 to 9, inclusive, of $4,438,000 exceed the allocated costs found reasonable herein by $2,065,000; the detail of this relationship of revenues to costs and the amount of excess for each purchaser is shown in Exhibit A attached to Opinion No. 73 and is made a part of this order by reference;

(13) Therefore, the rates and charges made, demanded, and received by Colorado Company for and in connection with the transmission and sale of natural gas for resale in interstate commerce to the gas utilities listed in paragraph (3) above are unjust, unreasonable and excessive to the extent of $2,065,000 per year;

(14) The rates and charges made, demanded, and received by Colorado Company, after reflecting the reduction hereinafter ordered, will be just and reasonable;

Therefore, the Commission orders that:

(A) The petition of Colorado Interstate Gas Company to reopen these proceedings for the purpose of taking further evidence be and the same is denied;

(B) The rates and charges made, demanded, or received by Colorado Interstate Gas Company for the transportation and sale of natural gas for resale in interstate commerce under its Rate Schedules FPC Nos. 1 to 9, inclusive, shall be reduced by not less than $2,065,000 per year;

(C) Colorado Interstate Gas Company shall file on or before April 25, 1942, new schedules of rates and charges for or in connection with the transportation and sale of natural gas in interstate commerce for resale to reflect the reductions ordered in paragraph (B) above, which new schedules of rates and charges shall be effective as to all bills regularly rendered on and after May 15, 1942;

(D) Commission reserves the right to reject all or any part of such new schedules and in lieu thereof to prescribe the same by further order;

(E) On and after the effective date of the new schedules of rates and charges filed and made effective in accordance with paragraph (C) above, Colorado Interstate Gas Company shall cease and desist from making, demanding, and

receiving any rates and charges which do not reflect the reductions ordered in paragraph (B) above.

Order Reducing Rates Colorado-Wyoming Gas Company

Upon consideration of the orders previously issued in these proceedings, the evidence of record, the briefs filed, and the Commission having on this date issued Opinion No. 73, which is hereby incorporated and made a part hereof;

The Commission finds that:

(1) The Colorado-Wyoming Gas Company (hereinafter referred to as Wyoming Company), a Delaware corporation, owns and operates facilities for the transportation and sale of natural gas in interstate commerce for resale, and is a "natural-gas company" within the meaning of the Natural Gas Act. It operates a natural gas transmission system from a point near Littleton, Colorado, at the terminus of the Colorado Interstate Gas Company line, and extending in a northerly direction 114 miles to the city gate of Cheyenne, Wyoming. Approximately 98 percent of its total gas requirements are obtained from Colorado Interstate Gas Company, and the balance from local fields. Sales are made along the line to gas utilities and industrial customers and to Cheyenne Light, Fuel and Power Company at the terminus of the line;

(2) Natural gas sales to Cheyenne Light, Fuel and Power Company, Public Service Company of Colorado, Greeley Gas and Fuel Company, and Highway Gas Company are made under rate schedules on file with this Commission and are designated Colorado-Wyoming Gas Company FPC Rate Schedules Nos. 1 to 5, inclusive. The rates and charges demanded, observed, charged, and collected by Wyoming Company for the transportation and sale of natural gas for resale under FPC Rate Schedules Nos. 1 to 5, inclusive, together with all rules, regulations, practices, and contracts affecting such rates and charges, are subject to the jurisdiction of this Commission;

(3) The original undepreciated cost of Wyoming Company's gas plant as of December 31, 1939, is $1,678,878;

(4) The amount of $395,944 for accrued depreciation in the property of the Wyoming Company as of December 31, 1939, is the best possible estimate of the actual depreciation as of that date and is reasonable;

(5) The amount of $1,282,934 (original cost of $1,678,878 less accrued depreciation of $395,944), is the depreciated original cost of Wyoming Company's gas plant as of December 31, 1939;

(6) An allowance of $78,813 for additions to property from December 31, 1939, to December 31, 1941, and $16,235 for working capital are sufficient and reasonable; these amounts added to the depreciated original cost, less $12,183 of contributions in aid of construction, result in an amount of $1,365,799 (accepted as $1,366,000) as the proper prudent investment rate base upon which Wyoming Company is entitled to earn a fair rate of return;

(7) An annual rate of return of 6½ percent on the rate base of $1,366,000, or $88,790 is a fair and reasonable return to Wyoming Company;

(8) Reasonable and proper allowances for operating expenses, including an allowance for amortizing rate case expenses over a five-year period, cost of purchased gas, depreciation and all taxes are as follows:

Operating expenses	$ 85,364
Cost of purchased gas	498,103
Depreciation expense	38,280
Taxes	57,106
Total	$678,853

(9) By order entered in these proceedings, as of this date, against Colorado Interstate Gas Company, the above cost of purchased gas has been reduced, effective on all bills rendered on and after May 15, 1942, by $98,000 annually, thereby reducing the above total to $580,853;

(10) The total cost of all services of Wyoming Company is the sum of $580,853, paragraph (9) above, and

$88,790 for a fair return, or $669,643; of this total $462,700 is properly and reasonably allocated to sales made under FPC Rate Schedules 1 to 5, inclusive;

(11) The total revenues for 1939 under Rate Schedules Nos. 1 to 5, inclusive, of $581,700 exceed the allocated costs found reasonable herein by $119,000; the detail of this relationship of revenues to costs and the amount of excess for each purchaser is shown in Exhibit B attached to Opinion No. 73 and is made a part of this order by reference;

(12) Therefore, the rates and charges made, demanded, and received by Wyoming Company for and in connection with the transmission and sale of natural gas for resale in interstate commerce to the gas utilities listed in paragraph (2) above are unjust, unreasonable and excessive to the extent of $119,000 per year;

(13) The rates and charges made, demanded, and received by Wyoming Company, after reflecting the reduction hereinafter ordered, will be just and reasonable;

Therefore, the Commission orders that:

(A) The rates and charges made, demanded, or received by Colorado-Wyoming Gas Company for the transportation and sale of natural gas for resale in interstate commerce under its Rate Schedules FPC Nos. 1 to 5, inclusive, shall be reduced by not less than $119,000 per year;

(B) Colorado-Wyoming Gas Company shall file on or before May 25, 1942, new schedules of rates and charges for or in connection with the transportation and sale of natural gas in interstate commerce for resale to reflect the reductions ordered in paragraph (A) above, which new schedules of rates and charges shall be effective as to all bills regularly rendered on and after June 15, 1942;

(C) Commission reserves the right to reject all or any part of such new schedules and in lieu thereof to prescribe the same by further order;

(D) On and after the effective date of the new schedules of rates and charges filed and made effective in accordance with paragraph (B) above, Colorado-Wyoming Gas Company shall cease and desist from making, demanding, and

receiving any rates and charges which do not reflect the reductions ordered in paragraph (A) above.

Petition of Colorado-Wyoming Gas Company for Rehearing, Reconsideration, Vacation and Modification of the Opinion and Order of the Commission Herein, Both of Date March 18, 1942.

Comes now Colorado-Wyoming Gas Company, one of the defendants above named, in compliance with the applicable rules and regulations of the Commission in that behalf, and hereby petitions for rehearing, reconsideration, correction, vacation and modification of the opinion herein and order pursuant thereto, as rendered and entered under date of March 18, 1942, in so far as the same relate to Colorado-Wyoming Gas Company. The sundry matters erroneously decided are specified and the errors made by the Commission are briefly stated in the Specifications of Error next following:

[Specifications of Error Nos. 1 to 59, inclusive, are identical with Specifications of Error Nos. 1 to 59, inclusive, appearing in the Petition for Review, supra, pages 5 to 19.]

60. Pending determination of this Petition, and in the event such Petition be denied by the Commission, then pending judicial review, Colorado-Wyoming Company, based on the record in this case, the practical necessities and equities of the situation, and the matters and things set forth in this Petition, prays that the operation of the opinion and order of the Commission of date March 18, 1942, be stayed and suspended pending such determination and review.

Respectfully submitted, this 16th day of April, 1942.

Opinion No. 73-A.

By The Commission:

At pages 2 to 3 in our Opinion No. 73 entered on March 18, 1942, disposition was made of the petitions of Canadian and of Colorado Interstate Companies, filed March 11, 1942, to reopen these proceedings.

However, in view of the claims asserted by the Companies, in petitions for rehearing and to reopen, filed April 14, 1942, as to increases in Federal income taxes for periods subsequent to the close of the hearing, it is deemed advisable to supplement our previous Opinion in more detail with respect to the position taken by the Companies therein.

The Companies allege that the Federal income and excess profits taxes, which they were required to pay in connection with operations for the year 1941, greatly exceed the amounts allowed by the Commission. Actually, as hereinafter shown, the taxes allowed by the Commission exceed the amounts which would have accrued in 1941 had the Companies' earnings been limited to a fair return for those years.

The fair return, that is the operating income, found reasonable, in our order, for Canadian Company amounts to $609,375.[1] To arrive at a base for calculating taxable income, this amount should be increased by income taxes allowed in computing the operating income, namely, $66,403,[2] and also by the annual amortization of rate case expenses allowed in the amount of $41,000,[3] which expenses are customarily deductible items for income tax purposes in the year paid rather than in the year amortized. From this total of $716,778 there should be deducted interest and the difference between other non-operating income and deductions, in the net sum of $417,431,[4] which is allowable for income tax purposes, but which is payable out of the fair return, and also an additional amount of $355,007[5] repre-

[1] Finding No. 10.

[2] Exhibit No. 163—Statement No. 1.

[3] Exhibit No. 163—Statement No. 2.

[4] Exhibit No. 168, page 1.

[5] Depreciation and depletion per books for 1939 and deducted in computing taxable income was $593,750 (Exhibit No. 168, page 1); that allowed as reasonable and proper in Finding No. 11 was $238,743.

senting depreciation and depletion deductible for income tax purposes, in excess of that allowed by the Commission. The total of these two latter deductions exceeds the aforesaid amount of $716,778.

If Canadian Company had been limited in 1941 to a return of $609,375, which was found to be a fair and reasonable return,[6] it would have had no net taxable income and would not have been obligated to pay any Federal income tax for that year. Therefore, the amount of $66,403 for 1939 Federal income taxes, allowed in Finding No. 11 as a reasonable item of operating expense, was ample.

The fair return allowed Colorado Company amounts to $619,775,[7] to which should be added income taxes allowed in Finding No. 9 in the amount of $391,526,[8] amortization of rate case expenses in the sum of $43,000[9] and the excess of "Other Income" over "Income Deductions," in the sum of $95,454,[10] giving a total maximum taxable income of $1,149,755. The normal income and surtaxes of 31 per cent[11] applied to the foregoing figure would disclose a tax liability of $356,424, as against the $391,526 allowed in our order. Furthermore, the amount of Colorado Company's taxable income will be smaller than $1,149,755, inasmuch as the said company has been deducting for income tax purposes approximately $272,000 more for depreciation and amortization than was allowed in determining a fair return.[12] Giving recognition to these additional deductions would reduce the tax, at the rate of 31 per cent, to approximately $272,039, as compared with the $391,526 heretofore allowed.

[6] Finding No. 10.

[7] Finding No. 8.

[8] Exhibit No. 140, page 118.

[9] Opinion 73, page 45.

[10] Exhibit No. 140, page 1.

[11] Under the Revenue Act of 1941, the effect of the application of the several brackets of normal surtax rates is to provide a combined normal and surtax rate fractionally less than 31 per cent; however, for convenience, the computation herein is based upon a 31 per cent rate and represents the maximum income and surtax rates under said Act.

[12] The depreciation deducted for income tax purposes in the year 1939 in the amount of $422,869, together with the amortization of contracts and franchises, deductible for income tax purposes, in the amount of $131,537, or a total of $554,406 (Exhibit 170-A), exceed the depreciation and amortization, totalling $282,195 (See p. 34 of Op., and Finding No. 9 of Order), by the amount of $272,211.

Accordingly, if Colorado Company had been limited in 1941 to a return of $619,775, which was found to be a fair and reasonable return,[13] the total Federal income tax which it would have been obligated to pay on its taxable net income for that year would have been approximately $119,000 less than the amount of $391,526[14] allowed as an operating expense. The Commission's allowance therefore was ample.

The reductions heretofore ordered will eliminate excess earnings and will also eliminate any liability for claimed excess profits tax. Among other things, the excess profits tax is based upon excess earnings of the taxable year, as compared with the four-year base period, namely, the years 1936 to 1939. The Companies' earnings for these years[15] were substantially in excess of those allowed as reasonable in our orders herein. As stated at page 39 of our Opinion, a comparative analysis of the Companies' income statements for each of the years 1937, 1938 and 1939, as well as for the 12 months ended September 30, 1940, "reveals little differences in the net operating results for 1939 compared with either the three-year average or the 12 months ended September 30, 1940." The ordered reduction in rates in these proceedings will eliminate the Companies' excess income. Their income from operations under the said Orders will be below, rather than above, the 1936 to 1939 average.

The proceedings herein originated with the filing of a complaint by the City and County of Denver, Colorado, in December, 1938. Extended hearings have been had and a record made comprising some sixteen thousand pages of transcript of testimony and 316 exhibits. As stated in our main Opinion, ample opportunity was afforded the parties to fully present their evidence. At the time of the close of the hearing in April, 1941, this Nation's defense program with its incident economic problems had been in progress for a number of months and evidence in the record as to that fact was given its due weight.

In Canadian and Colorado Companies' petitions to reopen these proceedings, isolated items of claimed increase of cost of operations are asserted, but no allegations are made as

[13] Finding No. 8.
[14] Exhibit No. 140, page 118.
[15] Exhibit 185.

to either the gross or the net operating revenues realized by the Companies for the year 1941 and the period subsequent thereto; and no allegations are made as to the manner or the amount in which said revenues differ from those utilized by the Commission in its Orders and which the Commission considered productive of the fair return allowed in such orders; nor are the claimed increased costs applied to such operating revenues so as to indicate in what manner or amount the changed economic conditions affect the Companies' fair returns. No allegations of this nature are made by the Companies, either as to operations under existing rates or as to operations that would obtain if the ordered reductions were made effective.

The aforesaid matters are in further explanation of the reasons set forth in our Opinion No. 73 for denying the Companies' petitions to reopen these proceedings, and do not in any manner modify or change the finding and ordering clauses of the Orders of March 18, 1942, which Findings and Orders are predicated upon the record made herein

Orders denying Canadian and Colorado Companies' petitions for rehearing and to reopen will be entered. An order denying Colorado-Wyoming Compan's petition for rehearing will be entered.

Dated at Washington, D. C., this 13th day of May 1942.

Order Denying Petition for Rehearing and to Reopen.

Upon consideration of the petition of Canadian River Gas Company filed April 14, 1942, for rehearing with respect to the Commission's order reducing rates of said Company entered on March 18, 1942, and the Commission's Opinion No. 73, and to reopen the said proceedings; and upon further consideration of all previous orders in this proceeding, the evidence adduced of record, the briefs and other documents filed, and having on this date made and entered its Opinion No. 73-A, which is incorporated by reference as a part hereof, adhering to its Opinion No. 73 and its order of March 18, 1942;

The Commission finds that:

No new facts have been presented or alleged in the

petition for rehearing and to reopen which would justify a reversal or revision of the Commission's said order and said Opinion No. 73, entered March 18, 1942, and no principles of law are stated in the said petition for rehearing and to reopen which were not fully considered by the Commission before it rendered said order and said Opinion:

Now, therefore, the Commission orders that:

The petition for rehearing and to reopen be and it is hereby denied.

Order Denying Petition for Rehearing and to Reopen.

Upon consideration of the petition of Colorado Interstate Gas Company filed April 14, 1942, for rehearing with respect to the Commission's order reducing rates of said Company entered on March 18, 1942, and the Commission's Opinion No. 73, and to reopen the said proceedings; and upon further consideration of all previous orders in this proceeding, the evidence adduced of record, the briefs and other documents filed, and having on this date made and entered its Opinion No. 73-A, which is incorporated by reference as a part hereof, adhering to its Opinion No. 73 and its order of March 18, 1942;

The Commission finds that:

No new facts have been presented or alleged in the petition for rehearing and to reopen which would justify a reversal or revision of the Commission's said order and said Opinion No. 73, entered March 18, 1942, and no principles of law are stated in the said petition for rehearing and to reopen which were not fully considered by the Commission before it rendered said order and said Opinion:

Now, therefore, the Commission orders that:

The petition for rehearing and to reopen be and it is hereby denied.

Order Denying Petition for Rehearing and Stay.

Upon consideration of the petition of Colorado-Wyoming Gas Company filed April 20, 1942, for rehearing and stay

with respect to the Commission's order reducing rates of said Company entered on March 18, 1942, and the Commission's Opinion No. 73; and upon further consideration of all previous orders in this proceeding, the evidence adduced of record, the briefs and other documents filed, and having on this date made and entered its Opinion No. 73-A, which is incorporated by reference as a part hereof, adhering to its Opinion No. 73 and its order of March 18, 1942;

The Commission finds that:

No new facts have been presented or alleged in the petition for rehearing which would justify a reversal or revision of the Commission's said order and said Opinion No. 73, entered March 18, 1942, and no principles of law are stated in said petition for rehearing and stay which were not fully considered by the Commission before it rendered said order and said Opinion;

Now, therefore, the Commission orders that:

The petition for rehearing and stay be and and it is hereby denied.

DESIGNATED PORTIONS OF TRANSCRIPT OF THE TESTIMONY AND EXHIBITS HEREIN, AND OF PRINTED "ABSTRACT OF THE EVIDENCE" BEFORE THE FEDERAL POWER COMMISSION, RELATING TO TESTIMONY, EXHIBITS AND OTHER PROCEEDINGS OF AND BEFORE FEDERAL POWER COMMISSION.

History, Development and Current Operations of Colorado-Wyoming Company.

James V. O'Connor called as a witness by and on behalf of the Federal Power Commission, being first duly sworn, testified as follows:

Direct Examination.

By Mr. Lange:

Q. Please state your name.
A. James V. O'Connor.

Q. Where do you live?
A. I reside in Denver, Colorado.
Q. By whom are you presently employed?
A. The Federal Power Commission.
Q. How long have you been so employed?
A. Since September 1934.
Q. In what capacity?
A. An engineer at the present time, a gas engineer.
Q. Mr. O'Connor, will you for the record briefly state your qualifications in connection with the work in which you are in charge?

A. I was graduated from the Massachusetts Institute of Technology in 1923 with the degree of Bachelor of Science in Mechanical Engineering. In 1927 and 1928 I attended the night session of the Graduate School of Business Administration of New York University.

From 1923 to 1928 I was employed by the Brooklyn Edison Company. My work with this company included making acceptance tests on steam power plant equipment; tests and studies to improve the performance of such equipment; development of improved plant operating methods; preparation of schedules for the coordinated operation of the company's generating plants with the plants of interconnected companies to reduce capital and operating costs; analysis of the operations of the company and other large electric companies; inventory of property, perparation of forecasts of power sales, output, and demands; and miscellaneous tests, investigations, studies, and reports on sundry operating problems.

From 1929 to 1934, I was employed by the American Gas Association. My work with the Association included the collection, compilation and analysis of reports filed by manufactured and natural gas companies; the preparation of reports on the production, transportation, distribution and sale of gas, the operations of gas companies, and the revenues, expenses, income and investment of reporting companies; preparation of economic and engineering data for use of committees of the Association investigating various problems of the gas industry; preparation of sundry data for, or in cooperation with, Government agencies, gas utilities, and others.

From 1934 to 1940 I have been employed by the Federal Power Commission. Until 1938 my work was concerned primarily with the electric utility industry, and since that year, with natural gas companies. My work with the Commission has included studies on various matters including operation of natural gas and electric companies, rates, contracts, and related matters.

Q. Mr. O'Connor, have you had occasion in connection with your work with the Federal Power Commission to look into the matters involved in the investigaton of the Canadian River Gas Company, the Colorado Interstate Gas Company, and Colorado-Wyoming Gas Company?

A. I have.

Q. When did you first begin your work in connection with that investigation?

A. March 15, 1939.

Q. March 15, 1939?

A. Yes.

Q. Have you been employed in that work ever since then?

A. I have.

Q. Did you in connection with that work have opportunity to go over the company's physical properties personally or to view them?

A. I did.

Q. That is with reference to all three of the companies?

A. That is right.

Q. Did you in connection with that work have occasion to prepare or supervise the preparation of any maps showing the physical facilities employed by these companies in their operation?

A. I did.

Mr. Lange: I will ask the reporter to please mark this map for identification.

The Trial Examiner: It will be marked for indentification as Exhibit No. 44.

(Exhibit 44, Witness O'Connor, marked for identification.)

By Mr. Lange:

Q. Mr. O'Connor, this map which has just been identified as Exhibit No. 44, is the map that was prepared under your direction and supervision?

A. That is right.

Q. Will you please explain what that map represents?

A. I have a written statement here.

Q. Will you please read that statement?

A. Yes.

(Reading)—Exhibit No. 44 is a map entitled "General Map of the Pipeline Systems of Canadian River Gas Company, Colorado Interstate Gas Company and Colorado-Wyoming Gas Company and Portions of the Systems of other Major Pipe-line Companies Taking Gas from the Texas Panhandle and Hugoton Gas Fields."

This map was prepared under my supervision. For the three companies under investigation in this proceeding, Canadian River Gas Company, Colorado Interstate Gas Company, and Colorado-Wyoming Gas Company, the information shown on the map is based on maps filed with the Commission under Order No. 51, and more detailed maps supplied by the companies to the Commission's engineers during the investigation. The information shown on the map for Amarillo Oil Company, Panhandle Pipe Line Company, West Texas Gas Company, Central Gas Utilities Company, Texoma Natural Gas Company, and Natural Gas Pipeline Company of America is based on maps filed by those companies with the Commission under its Order No. 51. The transmission facilities of all the companies just mentioned are shown diagrammatically but approximately to scale as to their location.

In addition, the map shows diagrammatically, for general information, the approximate point of beginning and general direction of the transmission lines of a number of large pipe line companies which originate in the same general area as the lines of the preceding companies. These companies include Cities Service Gas Company, Consolidated Gas Utilities Corporation, Lone Star Gas Company, United Gas Pipe Line Company, Northern Natural Gas Company, and Panhandle Eastern Pipe Line Company. All these companies take gas from the general area known

as the Texas Panhandle Field. Part of the transmission systems of the last two named companies, Northern Natural Gas Company and Panhandle Eastern Pipe Line Company, originates in the southwestern part of Kansas, in the area generally referred to as the Hugoton Field.

The purpose of this exhibit is to show the location of the gas transmission facilities of the three companies under investigation in this proceeding and of other companies which transport gas produced by Canadian River Gas Company, and also the relative location of the lines of all the aforesaid companies to other important pipe line companies owning gas transmission facilities in the same general area.

The map shows state and county lines. It also shows the location of the transmission facilities of Canadian River Gas Company, Colorado Interstate Gas Company and Colorado-Wyoming Gas Company, and their points of interconnection with each other and with other parties, for the purchase and receipt, and for the delivery and sale of, natural gas.

The transmission line of Canadian River Gas Company begins at a point in Moore County and extends in a northwesterly direction through the counties of Hartley and Dallam, Texas, into Union County, New Mexico, and crosses the Texas-New Mexico state line at the boundary of Dallam County, Texas and Union County, New Mexico. In addition, the location of various branch or lateral lines and other facilities of Canadian River Gas Company are shown on the map.

The main transmission line of Colorado Interstate Gas Company begins at the terminus of the transmission line of Canadian River Gas Company and extends in a northwesterly direction through Union County, New Mexico, across the New Mexico-Colorado state line, and through Las Animas, Pueblo, El Paso, Douglas, and Arapahoe counties, Colorado. The map also shows the location of the 10-inch lateral line to Arapahoe Measuring Station near Littleton, Colorado, as well as other lateral lines and facilities of Colorado Interstate Gas Company.

The main transmission line of Colorado-Wyoming Gas Company begins at the Arapahoe Measuring Station of Colorado Interstate Gas Company and extends in a general northerly direction through Arapahoe, Jefferson, Boulder, Larimer, and Weld counties, Colorado, across the Colorado-Wyoming state line into Laramie County, Wyoming, terminating at Cheyenne. The map also shows the line through which the company receives gas from the Goodstein Pipe Line Company that has been produced in the Berthoud, Colorado field. In addition, the various branch or lateral lines are indicated on the map.

Gas produced by Canadian River Gas Company in the Texas Panhandle Field is transmitted through its main transmission line, across the Texas-New Mexico state line, to the junction with the main transmission line of Colorado Interstate Gas Company in Union County, New Mexico. The gas is then transmitted by the Colorado Interstate Gas Company through its main transmission line across the New Mexico-Colorado state line to the junction with the main transmission line of Colorado-Wyoming Gas Company in Arapahoe County, Colorado. The gas is then transmitted through the main transmission line of Colorado-Wyoming Gas Company across the Colorado-Wyoming state line to Cheyenne, Wyoming. Gas produced in the Texas Panhandle Field by Canadian River Gas Company flows in a continuous stream through the transmission lines of Canadian River Gas Company, Colorado Interstate Gas Company, and Colorado-Wyoming Gas Company, from Texas, through New Mexico and Colorado, into Wyoming. Gas is also delivered from this stream to various points in Texas, New Mexico, Colorado and Wyoming, for resale for ultimate public consumption.

The map also shows the transmission lines of Amarillo Oil Company and Panhandle Pipe Line Company, which extend from wells of Canadian River Gas Company in the Texas Panhandle Field to Amarillo and vicinity.

The map shows the part of the transmission line of West Texas Gas Company from the Texas Panhandle Field to the vicinity of Amarillo, where it is interconnected with the line of Panhandle Pipe Line Company. The part of

the transmission system of West Texas Gas Company not shown on the map extends from Amarillo in a general southerly direction to several communities in Texas, and also to the Texas-New Mexico state line, near which line gas is sold to New Mexico Eastern Gas Company for resale to consumers in New Mexico and Texas.

The transmission line of Texoma Natural Gas Company from its Fritch Compressing Station in Hutchinson County, Texas to Gray Junction, Beaver County, Oklahoma, which crosses the Texas-Oklahoma state line, is shown on the map. Canadian River Gas Company leases a 25-per cent undivided interest in the transmission facilities of Texoma Natural Gas Company, and delivers gas to Colorado Interstate Gas Company at Gray Junction, Oklahoma. At that point Colorado Interstate Gas Company sells gas to Natural Gas Pipeline Company of America, which the latter transports through its system extending to Joliet, Illinoi. From this line, Natural Gas Pipeline Company of America sells gas for resale for ultimate public consumption in Kansas, Nebraska, Iowa and Illinois.

Q. Mr. O'Connor, that map has in the lower left-hand corner the legend indicating the ownership of the various lines and showing the abbreviations affixed to the various lines on the map, is that correct?

A. That is correct.

Q. I will ask you whether in connection with your work in this investigation you have also prepared separate maps of each of the following: The Canadian River Gas Company, Colorado Interstate Gas Company, and Colorado-Wyoming Gas Company, showing in more detail the physical properties, as well as the delivery points on each of those lines?

A. I have prepared maps showing the transmission facilities of each company on separate maps and the field facilities of the Canadian River Gas Company.

Q. On a separate map?

A. On a separate map.

Mr. Lange: I would like to ask the reporter to mark this exhibit for identification as Exhibit No. 45.

(Exhibit 45, Witness O'Connor, marked for identification.)

By Mr. Lange,

Q. Mr. O'Connor, will you look at this map and state whether or not it was prepared under your direction or supervision?

A. It was.

Q. Mr. O'Connor, what does this map, Exhibit No. 45, represent?

A. It shows the general location of the wells of the Canadian River Gas Company, the field lines or gathering lines, and other principal facilities of the company in the field, including the Bivins Compressing Station and gasoline plant, and it also shows the Kitch Compressing Station and gasoline plant of the Texoma Natural Gas Company, and the transmission line of Texoma: that is, the direction of it, in which facilities the Canadian River Gas Company leases a 25-per cent undivided interest.

Q. I note in the lower left-hand corner of the map there is a legend giving by symbols the various facilities of the company, is that right?

A. Yes, sir.

Q. And it also indicates the line of pipes as shown on the map?

A. Yes, sir.

Q. Have you prepared a statement containing a description of these facilities?

A. I have.

Q. That description I referred to is a combined statement of all three companies?

A. No.

Q. It describes more than that map of the Canadian River Gas Company?

A. That is right.

Mr. Lange: I will have the reporter please identify this map as Exhibit 46.

(Exhibit 46, Witness O'Connor, marked for identification.)

By Mr. Lange:

Q. I show you this map identified as Exhibit 46. What does it represent, Mr. O'Connor?

A. It is a map showing the general location of the gas transmission system of the Canadian River Gas Company as of December 31, 1939.

Q. Was this map prepared under your direction and supervision in connection with your work in the investigation of this company?

A. It was.

Q. Mr. O'Connor, will you describe the facilities as portrayed on these two maps just identified in connection with the properties of the Canadian River Gas Company?

A. I have another statement here which describes them in some detail.

Q. Of the Canadian River Gas Company?

A. Yes.

Q. Will you read that statement, please?

A. All of it or the resume?

Q. The statement itself.

Mr. Campbell: If the Examiner pleases, may I ask Mr. O'Connor just one question?

Mr. Lange: It is all right.

Mr. Campbell: Is the Federal Power Commission your sole employer at this time?

The Witness: Yes, sir.

Mr. Campbell: If the Examiner pleases, for the record, and while, perhaps, there is very little in these exhibits so far that have just been identified, there is an objection to all of Mr. O'Connor's testimony, which I think in frankness to all concerned we might just as well make. It is this:

From Mr. O'Connor's statement it appears that the Federal Power Commission is his sole employer. It appears in this case that the Federal Power Commission is the complainant and the tryer of the facts and of course it will ultimately be the decider of the facts in this case.

We submit it violates due process for an employe of the judge and the jury, so to speak, to be a witness in this case. Therefore, the Colorado Interstate Gas Company and the Canadian River Gas Company object to any and all of the testimony offered by employes of the Federal Power Commission in this case.

The Trial Examiner: The objection will be overruled.

You may proceed, Mr. Lange.

Mr. Campbell: Let the record show an exception. To avoid duplicity I would like to say we propose to renew that objection to each Federal Power Commission witness and I presume it will be overruled, but we would like to have the record so show there.

The Trial Examiner: Very well.

Mr. Keffer: So the record may be perfectly clear, the Canadian River Gas Company registers the same objection and I take it it is overruled, and we will also make an exception to the ruling.

The Trial Examiner: Very well.

Mr. Lange: At this time we desire to introduce these maps in evidence, maps which have been identified here.

The Trial Examiner: Exhibits Nos. 44, 45 and 46, Mr. Lange?

Mr. Lange: That is right.

The Trial Examiner: Is there any objection to the offer of Commission's counsel?

Mr. Brock: We have no objection except the one just made by Mr. Campbell, and subject to checking, of course, for corrections.

The Trial Examiner: Yes, that will be understood.

Exhibits Nos. 44, 45 and 46, inclusive, will be received.

(Exhibits 44, 45 and 46, Witness O'Connor, received in evidence.)

By Mr. Lange:

Q. Mr. O'Connor, have you prepared a statement with reference to the description of these facilities of the Canadian River Gas Company?

A. I have prepared a statement which sets forth certain facts concerning the development of the property of the company. It is a rather brief description of the facili-

ties owned and leased as of December 31, 1939, and a description of the operations of the company in the year 1939.

Mr. Lange: Let that be identified by the reporter, please.

The Trial Examiner: It will be marked for identification as Exhibit No. 47.

(Exhibit 47, Witness O'Connor, marked for identification.)

By Mr. Lange:

Q. Mr. O'Connor, will you read that statement into the record, please?

A. You mean the description of this exhibit?

Q. Yes.

A. (Reading)—Exhibit No. 47, entitled "Canadian River Gas Company, General Description of Property and Operations," was prepared by me and under my direct supervision.

The exhibit contains a brief statement of important facts relating to the development of the properties of Canadian River Gas Company, a general description of facilities owned by the company as of December 31, 1939, and a brief description of the operations of the company in the year 1939. The exhibit also contains a "gas balance" statement for 1935 to 1939.

The basic data used in preparing the exhibit were obtained from contracts filed by the company with the Federal Power Commission, information supplied by the company on request, an investigation of the records of the company, inspection of its facilities by me and by persons working under my direct supervision, and from information collected by the Commission's engineering and accounting staff during the investigation under Docket G-124.

Beginning on page 1, the exhibit sets forth certain important facts relating to the development of the properties owned or leased by Canadian River Gas Company. The original acquisitions of gas production facilities from Amarillo Oil Company in 1928 are described, and the subsequent purchases of other properties and construction of facilities required to transmit natural gas from the gas

field in Texas to the markets developed by and for the company are outlined.

Commencing on page 2, there is a description of facilities owned or leased by Canadian River Gas Company as of December 31, 1939. This description is not intended to be full or complete as to detail, but it covers the more important facts as to the extent and location of the facilities.

Beginning on page 3, Exhibit No. 47, it briefly describes the operations of Canadian River Gas Company in 1939. This description shows that Canadian River Gas Company produced all its gas requirements in 1939 from its own wells in the Texas Panhandle Field, transmitted gas from Texas into New Mexico and Oklahoma, and sold gas to three companies in Texas, New Mexico and Oklahoma, which was resold for ultimate public consumption for domestic, commercial and industrial uses in eight states—Texas, New Mexico, Colorado, Wyoming, Kansas, Nebraska, Iowa and Illinois.

Schedule No. 1 of Exhibit No. 47 is a tabulation of gas receipts and disbursements of Canadian River Gas Company in MCF on a uniform pressure base of 14.65 pounds per square inch absolute, for the years 1935 through 1939.

Mr. Lange: We desire at this time to offer this exhibit in evidence.

Mr. Brock: We, of course, haven't read this exhibit. We will have to reserve any objections to it until we have had an opportunity to read it.

The Trial Examiner: I think, Mr. Lange, in view of the fact that the exhibit does contain a rather lengthy statement, the Examiner will defer ruling on the exhibit at this time.

Mr. Lange: That is agreeable, Mr. Examiner.

Q. Mr. O'Connor, in connection with your work on this investigation, did you also have occasion to prepare a map showing the facilities employed by Colorado Interstate Gas Company in connection with its transportation of natural gas?

A. I did.

Mr. Lange: I will have the reporter mark this exhibit for identification as Exhibit No.—

The Trial Examiner: It will be marked for identification as Exhibit No. 48.

(Exhibit 48, Witness O'Connor, marked for identification.)

By Mr. Lange:

Q. Mr. O'Connor, I will ask you whether this map, designated as Exhibit No. 48, was prepared by you or under your general supervision and direction?

A. It was prepared under my general supervision and direction.

Q. Mr. O'Connor, what does Exhibit No. 48 represent?

A. Exhibit No. 48 is a map showing the general location of the transmission facilities of Colorado Interstate Gas Company as of December 31, 1939.

Q. In other words, it reflects the physical facilities of the company, showing the connecting points also with Canadian River Gas Company in the lower right-hand corner?

A. It shows that the main transmission line of Colorado Interstate Gas Company begins at the terminus of the main transmission line of Canadian River Gas Company in Union County, New Mexico, and extends across New Mexico and into Colorado, terminating in the vicinity of Denver, Colorado.

Q. And it also shows the connecting point in the vicinity of Denver with Colorado-Wyoming Gas Company?

A. It does.

Q. Have you in connection with the study of this company's facilities and operations prepared a descriptive statement?

A. I have.

Mr. Lange: I will ask the reporter to identify this exhibit.

(Exhibit 49, Witness O'Connor, marked for identification.)

By Mr. Lange:

Q. Mr. O'Connor, will you read into the record a resume

of the exhibit just identified as No. 49, being a general description of the property and operations of Colorado Interstate Gas Company?

A. (Reading)—Exhibit No. 49, entitled "Colorado Interstate Gas Company, General Description of Property and Operations," was prepared by me and under my direct supervision.

This exhibit contains a brief statement of the important facts relating to the development of the property of Colorado Interstate Gas Company, a general description of facilities owned by the company as of December 31, 1939, and a brief description of the operations of the company in 1939. The exhibit also contains a "gas balance" statement for 1935 to 1939.

The basic data used in preparing the exhibit were obtained from contracts and reports filed by the company with the Federal Power Commission, information supplied by the company on request, an investigation of the records of the company, inspection of its facilities by me and by persons working under my direct supervision, and from information obtained by the Commission's accounting and engineering staff during the investigation under Docket G-124.

Beginning on page 1, the exhibit sets forth certain important facts relating to the development of the properties of Colorado Interstate Gas Company. The extent and location of the main transmission line, lateral lines, and other facilities are briefly described, and the time of construction of the various sections is stated. Major retirements and acquisitions of laterals since original construction are also stated.

A description, as of December 31, 1939, of the major natural gas facilities of Colorado Interstate Gas Company begins on page 2, Exhibit 41. This description is not intended to be complete as to detail, but it covers the more important facts as to the extent and location of principal facilities.

Exhibit No. 48 consists of a map, entitled "Natural Gas Transmission System of the Colorado Interstate Gas Company." This map shows the location of the transmission

facilities owned by the company, which serve to deliver gas to ultimate consumers, and the points of purchase and sale of gas on the Denver Line. The map does not show the connection of the line of Texoma Natural Gas Company with that of Natural Gas Pipeline Company of America at Gray Junction, Oklahoma, where Colorado Interstate Gas Company sells gas to Natural Gas Pipeline Company of America, because no facilities are owned by Colorado Interstate Gas Company at that location.

A brief statement of the operations of the company begins on page 4 of Exhibit No. 49. The gas volumes sold in 1939 to Natural Gas Pipeline Company of America at Gray Junction, Oklahoma, and the Denver line sales to the six direct customers, five gas distribution companies and one pipe line company are shown; the dates of initial natural gas service to each customer on the Denver line are also indicated. The description of the operations of the Colorado Interstate Gas Company shows that the company purchases its entire natural gas requirements from Canadian River Gas Company at two locations, Gray Junction, Oklahoma and Clayton Junction, New Mexico, and that all such gas is produced by Canadian River Gas Company in the Texas Panhandle Field. The description further shows that this gas is transmitted across state lines and is resold for ultimate public consumption for domestic, commercial, and industrial uses in six states—Colorado, Wyoming, Kansas, Nebraska, Iowa, and Illinois.

Schedule No. 1 of Exhibit No. 49 is a tabulation of gas receipts and disbursements of Colorado Interstate Gas Company in MCF on a uniform pressure base of 14.65 pounds per square inch absolute, for the years 1935 through 1939.

Q. Mr. O'Connor, in further connection with this work, I will ask you whether you prepared a map showing the facilities of Colorado-Wyoming Gas Company?

A. I have.

Mr. Lange: I will ask the reporter to identify this exhibit as Exhibit No. 50.

(Exhibit 50, Witness O'Connor, marked for identification.)

By Mr. Lange:

Q. Mr. O'Connor, I will ask you what the instrument identified as Exhibit 50 represents?

A. It is a map of the Natural Gas Transmission System of the Colorado-Wyoming Gas Company as of December 31, 1939, and it shows the general location of the transmission lines and gas purchases and gas delivery points, and compressing stations.

Q. Was this map prepared under your supervision and direction?

A. It was prepared under my supervision and direction.

Q. Mr. O'Connor, this map, Exhibit No. 50, shows the physical connection of Colorado-Wyoming Gas Company transmission line with that of Colorado Interstate Gas Company, does it not?

A. Yes, it shows the location of the Arapahoe measuring station of the Colorado Interstate Gas Company in Arapahoe County, Colorado, where the systems of Colorado Interstate Gas Company and Colorado-Wyoming Gas Company connect, and where Colorado Interstate Gas Company delivers gas to the Colorado-Wyoming Gas Company.

Q. Have you prepared a statement showing the description of these facilities of the Colorado-Wyoming Gas Company?

A. I have.

Mr. Lange: I will ask the reporter to mark this document for identification.

(Exhibit 51, Witness O'Connor, marked for identification.)

By Mr. Lange:

Q. Mr. O'Connor, will you state into the record what this general description of the property of Colorado-Wyoming Gas Company is as reflected in Exhibit No. 51?

(Vol. VI, pp. 792-815.)

Exhibit 50 (Appendix this Record).

Commission Exhibit 51 (Appendix this Record).

Commission Exhibit No. 44 (Appendix this Record).

Certificate of Incorporation of Colorado-Wyoming Gas Company, as follows:

(1) *Organization.*

Articles of Incorporation and Amendment (Exhibit 100).

Dated:

December 1, 1925, and December 10, 1931.

Incorporated:

Under laws of Delaware.

Capital Stock:

50,000 shares common stock without nominal or par value.

Term of Existence:

Perpetual.

* * * * *

Second, The principal office of the corporation is to be located in the City of Dover, in the County of Kent, in the State of Delaware, and the name of its resident agent is James M. Satterfield.

Third: The nature of the business of the corporation, and the objects and purposes proposed to be transacted, promoted and carried on are:

(a) To purchase, take, hold, own, lease, construct or otherwise acquire, to maintain and operate, mortgage, sell, convey, let exchange and deal in pipe lines, *distribution* lines, mains, pipes, conduits, ducts, services, pumping and compressor stations, terminals, tanks, work and plants, and any and all apparatus and/or appliances necessary, useful or convenient for the transportation, distribution, storage, measuring and marketing of gas for any purpose to which gas is or hereafter may be applied:

(b) To purchase, take, hold, own, lease, construct or otherwise acquire, to maintain and operate, mortgage, sell, convey, let, exchange and deal in gas-bearing, oil-bearing and other mineral-bearing properties, leases, mines, wells and rights, and any and all interest whatsoever therein or thereto, and to engage in the business of *producinct*, mining and selling gas, oil and other minerals:

(c) To purchase, take, hold, own, lease, construct or otherwise acquire, to maintain and operate, mortgage, sell,

convey, let, exchange and deal in, within and without the State of Delaware and in any part of the world, real property, lands, leaseholds, or any interest, estate and rights in real estate and any personal and mixed property, and any franchises, grants, rights, licenses or privileges necessary, useful or convenient for any of the purposes herein expressed or otherwise:

(d) To conduct and carry on all or any part of its business, without restriction or limit as to amount, either within or without the State of Delaware, in the other States, District of Columbia, territories, colonies or dependencies of the United States, and in any or all foreign countries, or in any part of the world, and to have one or more offices within or without the State of Delaware or in any part of the world:

(e) To do all and everything necessary, suitable, proper or convenient for the accomplishment of any of the purposes, or the attaining of any of the objects, or the exercise of any of the powers herein set forth, whether herein specified or not, either alone or in connection with other firms, individuals or corporations, both in the State of Delaware and in the United States and elsewhere, and to do any other act or acts, thing or things incidental or appurtenant to, or growing out of, or connected with said businesses or powers, or any part thereof, if not inconsistent with the laws under which this corporation is organized:

(f) It is declared that the objects and powers specified in the various paragraphs contained in this clause shall be in no wise limited or restricted by reference to or inference from the items of any other paragraphs of this or any other clause of this Certificate of Incorporation.

(Ex. 100.)

All of Petitioner's property is located and all its business operations carried on in the State of Colorado and Wyoming; all of its managing and operating offices, officers and employees are located in Colorado; all its books and records are kept in and maintained at Denver, Colorado; and all directors' meetings are held at Denver.

(Vol. 24, pp. 3272, 3288, 3289, 3317-3318, 3323, 3324.)

The Colorado-Wyoming Company has no mortgage bonds, debentures or other securities outstanding (Ex. 105). All of its common stock is outstanding and owned by Public Service Company of Colorado, and pledged in connection with the mortgage obligations of that company (Vol. 24, pp. 3298-3299).

(2) *Original System and Gas Supply.*

Colorado-Wyoming Company, incorporated in 1925, began operations in the same year. The Company owns and operates a natural gas transmission system from a point near Littleton, Colorado, to Cheyenne, Wyoming, with branches serving numerous communities, industrial plants and public authorities in the State of Colorado, also serving the City of Cheyenne and the United States War Department at Fort Warren in the State of Wyoming. (See Map, Ex. 50, Appendix.)

In December, 1925, the company entered into contract for the purchase of natural gas at the Wellington Field, so-called, in Larimer County, near Fort Collins, Colorado. This contract covered gas in excess of the needs of the seller, the Fort Collins Producing Corporation, and was to run for an indefinite period. In the latter part of 1925, a 6-inch transmission line was built from the Wellington Field to Fort Collins. Deliveries at Fort Collins began December 10, 1925, pursuant to contract with the local distribution company, acquired by Public Service Company in 1926. In 1926, a 6-inch transmission line was constructed from the Wellington Field to Cheyenne, Wyoming. Deliveries at Cheyenne began July 7, 1926, pursuant to contract of April 1, 1926, between the Company and the Cheyenne Light, Fuel & Power Company. In 1927, a 6-inch branch transmission line from the Wellington-Fort Collins main transmission line was constructed to the plant of Colorado Portland Cement Company near Laporte, Colorado. Initial delivery of gas to this industrial customer was made on November 5, 1927. These operations completed the operating system of Colorado-Wyoming Gas Company as then designed and planned.

Until 1929 the entire supply of natural gas to satisfy the

Company's requirements was secured from the Wellington Field (Ex. 51).

(3) *Changes in Company System and New Gas Supply.*

In the year 1929, however, it became apparent that the gas supply from the Wellington Field, which had been expected and was relied upon to meet all the requirements of the Company for a long term of years, was rapidly diminishing and would thereafter shortly be entirely exhausted. (Vol. 24, p. 3411; Vol. 29, pp. 4001-4003; 4033-4037; Ex. 120; Vol. 84, p. 12,464.)

The failing supply of available gas from the Wellington Field in Colorado, which rendered the substantial change of the Colorado-Wyoming Company's system essential in 1929 and 1930, is reflected in the annual purchases of gas in M.c.f. by the Company during the years 1928 to 1932, inclusive (Ex. 244):

	1928	1929	1930	1931	1932
Continental Oil Co.	2,254,599	1,718,642	1,275,030	453,955	163,078
Colorado Interstate Gas Co.	.....	33,943	888,112	1,800,153	2,112,038
Myer Goodstein	.....	.....	57,618	77,284	100,839

After 1932 deliveries from the Wellington Field were negligible and ceased entirely in 1937.

MR. HARRY HANCOCK, a witness for the Company and familiar with all its operations from the time of original construction of its first lines and facilities (Vol. 24, p. 3408, *et seq.*), testified with respect to the re-orientation and reconstruction of the Company's plant and operations occasioned by the failure of gas supply in the Wellington Field, as follows:

"Q. Mr. Hancock, is there any relationship between the operation of the lines of the Colorado Interstate Gas Company and the Colorado-Wyoming Gas Company?

"A. No.

"Q. Is there any pressure identity in those two lines?

"A. Only such pressure identity as may be coincidental.

"Q. Is the pressure in the line of the Colorado-Wyoming Gas Company controlled entirely by that company through its own facilities?

"A. It has been in the past from Arvada station north,

and in the future will be from Arapahoe station north, which will constitute in the latter case practically the entire property.

"Q. So that any identical pressure at any time that occurs between the pressure of the gas of the Colorado Interstate Company and the Colorado-Wyoming Gas Company is purely coincidental?

"A. That is right.

"Q. Mr. Hancock, the present system of the Colorado-Wyoming Gas Company has not always received its gas from the Colorado Interstate Gas Company at the Arapahoe station, has it?

"A. No, it has not.

"Q. Was the Colorado-Wyoming Gas Company an operating gas company prior to the time of any connection whatever between its system and the system of the Colorado Interstate Gas Company?

"A. It was.

"Q. Where was the original construction so far as Colorado-Wyoming Gas Company was concerned; and where did its pipe line go, and from what source did it obtain its gas?

"A. The first source of gas was the Wellington structure north of Fort Collins and the first line was built from that structure to Fort Collins.

"Q. Thence—

"A. And the next step was the construction of the 6-inch main line from the Wellington structure north to Cheyenne.

"Q. And were both of those communities first served wholly from the Wellington field?

"A. They were.

"Q. Thereafter was it necessary to readjust and reconstruct the system of the Colorado-Wyoming Gas Company?

"A. It was.

"Q. What was the necessity that required such reconstruction?

"A. The depletion of the Wellington field and the necessity of procuring the gas supply elsewhere.

"Q. So as the result of that the original facilities of the Colorado-Wyoming Gas Company became really a part of a larger plant with a wholly different source of supply?

"A. That is right."

(Vol. 25, pp. 3522-3524.)

As a consequence, in 1929 the Company undertook to secure a new and independent source of supply to continue service to its customers and to protect its own investment.

The only available supply was natural gas from the Texas Panhandle-Denver pipeline of Colorado Interstate Company. On October 3, 1929, the Colorado-Wyoming Company entered into a 20-year contract of purchase with Colorado Interstate Company for delivery of gas at a point in Arapahoe County, Colorado, near Littleton, called the "Arapahoe Station." This agreement provides for the sale and delivery by Colorado Interstate Company of natural gas as required by Colorado-Wyoming Company to supply domestic consumers, distribution companies in northern Colorado and southern Wyoming, industrial consumers under contract made with the consent and approval of Colorado Interstate Company and the gas requirements of the Colorado-Wyoming Company in its compressor stations and other property. (Ex. 101.)

In the years 1929 and 1930, Colorado-Wyoming Company constructed 30 miles of 10-inch and 43 miles of 8-inch main transmission line together with compressor station facilities, from the Arapahoe measuring station to Fort Collins, where connection was made with the existing operating system from Fort Collins, Colorado, to Cheyenne, Wyoming. In 1929, 1930 and 1931, branch transmission lines were constructed for sale and delivery of gas to Public Service Company of Colorado for resale to ultimate consumers in Arvada, Boulder, Berthoud, Brighton, Fort Lupton, Golden, Longmont, Loveland, Johnstown, Wheatridge, and to a number of points of delivery in the Denver suburban area generally referred to as the "Denver Fringe."

In 1930, a 6-inch transmission line was built from Loveland to Greeley for sale and delivery to Greeley Gas & Fuel Company of gas for resale to consumers in that community.

The Loveland-Johnstown-Greeley line includes extension and facilities for direct industrial service by Colorado-Wyoming Company to the Johnstown plant of the Great

Western Sugar Company as well as the town of Johnstown. (Ex. 103.)

From 1932 to 1939, lateral lines to serve direct industrial customers were constructed as follows: Kuner-Empson Co., Brighton; Valmont Electric Generating Station of Public Service Company of Colorado, near Boulder; Marston Lake Pumping Station, Denver Water Board, Jefferson County; Adolph Coors Co. at Golden; International Metals Foundation, near Littleton, all in Colorado.

Colorado-Wyoming Company presently owns and operates approximately 195 miles of natural gas transmission pipelines located in Arapahoe, Jefferson, Boulder, Adams, Larimer and Weld Counties in Colorado, and Laramie County, Wyoming, in rendering the service to the communities and customers hereinabove named. The total Wyoming mileage is 10.5 miles of 6-inch main line and 2.3 miles of 3½-inch branch line to Fort Warren. The main trunk line is approximately 114 miles long and the branch lines approximately 81 miles in length. The lines range in size from 10-inch nominal diameter to 6-inch nominal diameter on the main line, and from 8-inch to 1-inch nominal diameter on the branch lines. (Ex. 50, 51.)

The present compressor station main unit capacities of the Colorado-Wyoming Company are Arapahoe Station, 600 rated horsepower (in operation January, 1941, (Vol. 86, p. 12,875); Arvada, 1020 rated horespower; and Wellington Station, 340 rated horsepower. The original horsepower of the Wellington compressor station in 1928 was 1360. After 1929, when the original Fort Collins-Cheyenne system became a portion only of the Arapahoe Station-Fort Collins-Cheyenne system, much of the compressor station capacity at the Wellington station was transferred to the Arvada station in Jefferson county, near Denver, which latter station was originally constructed and enlarged in the years 1930 and 1931.

(Vol. 24, pp. 3407-3418.)

After construction of the Arapahoe-Fort Collins main line and the first delivery of Texas gas into the Fort Collins-Cheyenne system on January 21, 1930, there was no

enlargement of service in Wyoming, the War Department at Fort Warren and the Cheyenne Light, Fuel & Power Company continuing as the only customers in that state. (Ex. 105.)

A small amount of gas amounting to less than 2 per cent of its requirements is purchased locally by Colorado-Wyoming Company in the Berthoud Field, so-called, in northern Colorado, from the Goodstein Pipeline Company, the producer thereof. (Ex. 113.) The remaining 98 per cent of the gas requirements of the Company are purchased under its contract of October 3, 1929, from Colorado Interstate Company. The Company has not had and does not have any natural gas production. At all times it has purchased its entire requirements of natural gas.

(4) *Gas Sales M. c. f. 1939-1940.*

In addition to the sale of gas for resale to Public Service Company of Colorado, Greeley Gas & Fuel Company, and Cheyenne Light, Fuel & Power Company, a small amount of gas is sold also to Highway Gas Company for resale to its customers, with delivery at a point on the main line of the Company near Loveland, Colorado.

Direct industrial sales are made to ten Colorado industrial plants, enumerated, *post*.

Colorado-Wyoming Company sells natural gas directly to the United States War Department at Fort Warren, Wyoming, and Fort Logan, Colorado; to the United States Prison Farm, also at Fort Logan; and to the Board of Water Commissioners of the City of Denver, near Denver.

The total 1939 and 1940 sales of Colorado-Wyoming Company, at contract pressure base, were (Ex. 246):

Public Service Company of Colorado for resale in Colorado:

	M. c. f. Delivered	
	In 1939	In 1940
Boulder District	221,951	253,776
Brighton & Fort Lupton	38,227	45,896
Fort Collins District	445,744	472,666
"Denver Fringe"	330,250	354,293
Total	1,036,172	1,126,631

Total sales in the same years to Greeley Gas & Fuel Company, Greeley, Colorado, for resale were 170,847 M. c. f. in 1939, and 188,233 M. c. f. in 1940; and to Highway Gas Company, near Loveland, Colorado, for resale, were 5,334 M. c. f. in 1939, and 8,038 M. c. f. in 1940.

Total sales in 1939 and 1940 to Cheyenne Light, Fuel & Power Company at the Cheyenne, Wyoming, "city gate" for resale were 494,058 M. c. f. and 541,634 M. c. f., respectively.

Total sales for resale in 1939 were 1,706,411 M. c. f. and in 1940 were 1,864,636 M. c. f., an increase of 9%.

In the year 1939, the sales at Fort Warren, Wyoming, were 18,527 M. c. f.; and in 1940 were 19,436 M. c. f.; and at Fort Logan, Colorado, 8,776 M. c. f. and 8,035 M. c. f., respectively. In the same years sales to the Denver Water Board were 9,010 M. c. f. and 9,192 M. c. f., respectively. Sales to the Federal Prison Farm near Fort Logan began in 1940 and were 1,110 M. c. f.

Total sales to Public Authorities in 1939 were 36,313 M. c. f. and 37,763 M. c. f. in 1940, an increase of 4%.

Sales to direct Industrial customers, all in Colorado, were:

Customer	M. c. f. Sold *In 1939*	*1940*
Adolph Coors Company	18,677	15,294
Colorado Portland Cement Co.	1,015,502	894,048
Thos. Bate and Sons	81	389
Denver Pressed Brick Company	52,597	50,430
Fort Collins Producing Corp'n	4,575	8,901
Golden Fire Brick Company	66,921	45,174
Great Western Sugar Company	356,606	250,205
Kuner-Empson Company	38,570	42,167
Producers Canning Company	333	894
Public Service Co. of Colorado—		
Valmont Generating Station	31,056	0

Total sales to direct industrial customers were 1,584,918 M. c. f. in 1939, and in 1940 were 1,307,502 M. c. f., a decrease of 17.5%.

Total sales to the Company in M. c. f. at the contract pressure base in the year 1939 were 3,332,446 M. c. f., and in the year 1940, 3,209,991 M. c. f., a decrease of 4% (Ex. 246.)

(5) *Priorities of Service.*

The testimony of the Company witnesses was that the system of Colorado-Wyoming Company as originally built and as reconstructed and enlarged was conceived, constructed, and at all times operated on the foundation of the priority of domestic service and customers over industrial service and customers.

MR. HANCOCK testified on cross-examination in reference to the Colorado-Wyoming system, that "if service were contemplated only to the sales for resale, these lines would need to be constructed exactly as they are" and again "there is no intention of using any portion of the main line capacity when that gas is needed for delivery to sales for resale and public authorities, and that is the way it actually works out under actual operating conditions" (Vol. 28, p. 3842).

Further he again discussed the same point, as follows:

"Q. * * * the only portion of this entire investment that is applicable in your opinion to industrial and public authority customers on this company's system is $106,952, plant and investment depreciated to $90,551?

"A. That is right. If the system was built as it is to supply only the customers to whom gas is sold for resale, it would be necessary to have the plant, as here indicated, represented by the plant and investment figure of $1,877,648.

"Q. But the system was not in fact so built, was it, Mr. Hancock?

"A. It was so built except for small branches to these industrial customers who use gas off peak and are cut off at time of peak day demand.

"Q. Now, how was the system built that you attempt to apply to your calculated total investment here given in Exhibit No. 117?

"A. You say, how was the system built?

"Q. Yes, with reference to your interpretation of the applicable total investment of property, resale customers.

"A. The general pipe line system was built as it now is primarily to serve the customers receiving gas for resale.

"Q. Well, when you say right there 'primarily' what do you mean by 'primarily' with reference to the total?

"A. It means that the system was built, having in mind the gas volume requirements of the customers now receiving gas for resale, and the connection of industrial customers through specially built branch lines devoted solely to the service of these industrial customers, was purely incidental.

"Q. Purely incidental?

"A. Yes, sir, and did not affect the construction of the main pipe line system as a whole."

(Vol. 28, pp. 3814, 3815.)

See, Exhibits 101, 102, 103, 104, 242.

Q. Well, not as a whole—when was this first unit of this company's pipe line system constructed?

A. I believe that was in 1925.

Q. 1925, between what points?

A. I believe it was between the Wellington field and Fort Collins.

Q. All right, now, what was served—or, rather, what customers were served on that?

A. The city of Fort Collins.

Q. That was the sole customer?

A. As far as I know it was. By the city of Fort Collins I mean the distributing company which serves the city of Fort Collins.

Q. Yes.

A. Yes.

Q. And what was the next construction on this system?

A. I had those dates before me when I testified to this same information last Friday. I will look it up again if you would like to have it. It will take a few minutes.

Q. Yes, at this time it is important on two or three points with reference to that, if we can have it at this time.

A. The next construction was from the Wellington field in 1926 north to Cheyenne.

Q. And what customers were attached at that time?

A. The customer was the distributing company at Cheyenne.

Q. Any other customer or customers at that time?

A. I do not believe there were.

Q. Then the next construction and customer attached?

A. The next customer attached was the Public Service Company distributing system at Boulder, Colorado, in September 1929.

Q. In September 1929?

A. Yes.

Q. And what was the next one?

A. The town of Edgewater, in October 1929.

Q. Was that the distributing company there?

A. That is right.

Q. And then the next one?

A. The distributing company at Berthoud, in December 1929.

Q. The next one?

A. The distributing company at Arvada, in December 1929.

Q. The next one?

A. Do you wish me to include, Mr. Lange, the various industrial consumers along with the others?

Q. Yes, I want them all in chronological order. I forgot to mention that. I want all of the attachments in their chronological order.

A. I will go back on the dates, then.

Q. Yes.

A. The Producers Canning Company was first served in July 1927.

The Cement plant was first served in November 1927.

The Sugar plant of the Great Western Sugar Company was first served in November 1929.

The following cities were first served in the latter part of 1930: Loveland, Johnstown, Golden, Mount Air, and various small communities to the west of Denver.

The following cities were first served in the early part of 1931: Longmont, Brighton, and Fort Lupton.

The Golden Fire Brick Company was first served in August 1930.

Further service was given to small communities on the

west side of Denver in October of 1931, and the Kuner-Empson Company was first served in October 1934.

The Marston Lake delivery was first made in September 1926.

Further service was given to small communities west of Denver, including Wheatridge, in October 1936; also in October 1936 first service was given to Coors Brewery.

Mr. McCreery: Did you state the time of the first service at Greeley?

The Witness: I haven't yet. That is another table.

Mr. McCreery: Very well.

The Witness: I will go back to the public authority customers and then to Greeley.

The first delivery at Fort Logan was August 1930; the first delivery to the Greeley Gas & Fuel Company was in September 1930; Fort Warren was first served October 1, 1930; Highway Gas Company, August 1933. The first delivery to the Denver Pressed Brick Company was in April 1937 and to Valmont Power Plant delivery was made in March 1937. I believe that gives the dates of the first delivery to all of the customers of the company excluding minor taps and customers of that kind.

By Mr. Lange:

Q. Did you give the date of the first delivery to the distributing company at Cheyenne?

A. Yes, sir, I did. I stated it was in 1926, and now, with the note before me, I find it was in July 1926.

Q. July 1926?

A. Yes, sir.

Q. When was the taking of gas from the Berthoud field eliminated or restricted?

A. You mean the Berthoud field or the Wellington field, Mr. Lange?

Q. The Wellington field is the one I have reference to.

A. It is rather difficult to say when it was first restricted because it is a decline over a long period of years, the maximum production purchased by Colorado-Wyoming Gas Company for any one year being in 1928 with sub-

stantial declines in 1929, 1930, and even more rapidly in 1931, with accelerating declines on out to the date of last deliveries in 1937, the deliveries from 1933 to 1937 being almost negligible.

Q. The gas from the Wellington field, during the time that gas served the line from the Wellington field, was delivered at what destination and to what consumers?

A. It was delivered into the main line system as that system existed during each of the years when the Wellington gas was so delivered and intermingled or flowed to the various customers, it being probable that Cheyenne received most of the supply; that is, most of the gas delivered at Cheyenne was physically the gas produced from the Wellington field, but there might have been gas from other sources go to Cheyenne. After gas goes into a main pipe line system it is not practicable to identify which gas goes to which customer.

Q. Well, the flow of gas from the Wellington field was—strike that.

In what direction was the flow of gas from the Wellington field during the time that gas was taken from the field?

A. The gas flowed at certain times in two directions and at other times in one direction. During the period when the Wellington supply was greater than the Cheyenne requirements it flowed in two directions. When the supply became less than the Cheyenne requirements it only flowed in one direction, toward Cheyenne, along with other gas which flowed from the south to the Wellington field and intermingled with the Wellington gas for delivery to Cheyenne.

Q. Prior to the time that the Cheyenne requirement—strike that.

During the period of time the Cheyenne requirement did not include all of the production from the Wellington field to what other points on the line did the gas from the Wellington field flow?

A. Could I have that question, please?

Mr. Lange: Please read the question.

(The question referred to was read by the reporter, as set forth above.)

The Witness: It flowed south through the main line towards the distributing systems being served south of Wellington.

By Mr. Lange:

Q. To which points? To which delivery points?

A. That probably varied every day, depending upon the demand and the amount of production from the Wellington field.

Q. All right, what main line delivery points were there to which that gas flowed?

A. Principally to the distributing company in Fort Collins.

Q. To the distributing company in Fort Collins?

A. Yes, sir.

Q. Did it flow to any main line industrials?

A. Yes.

Q. Where?

A. The Cement plant.

Q. Where is that located? Will you please mark that on Exhibit No. 5, Mr. Hancock?

A. It is located at the caption "Laporte, Colorado, Portland Cement Company," which is just north of Fort Collins.

Q. That direct line industrial was served with gas from the Wellington field?

(Vol. 27, pp. 3815-3823.)

* * * * *

Q. Now, then, do you have the Mcf. delivered to the Colorado Portland Cement Company for the years 1927 and 1928?

A Yes, sir.

Q. All right.

A. In 1927, deliveries to Colorado Portland Cement Company, 40,633,000 cubic feet; in 1928, 1,298,567,000 cubic feet.

Q. Now, going back to 1927, do you have the total deliveries for that year in Mcf., and is the 1927 figure one that represents a whole year or what portion of a year?

A. There are two questions there. I will answer the first one first.

Q. All right.

A. The total sales in 1927 were 604,737,000 cubic feet. Do you wish the ratio there?

Q. Yes, please give me the Mcf. at each delivery point during that year.

A. The previously mentioned total delivery of 604,737,000 cubic feet comprises 189,523,000 cubic feet to the Cheyenne Light, Fuel & Power Company; 340,213,000 cubic feet to the distributing company at Fort Collins; 40,633,000 cubic feet to the Colorado Portland Cement Company; and 34,368,000 cubic feet to miscellaneous main line sales not reflected on this sheet as to individuals.

The previously mentioned 40,633,000 cubic feet sale to the Colorado Portland Cement Company is approximately 6.7 per cent of the total deliveries during that year, the delivery to the cement company starting on November 5, 1927.

Q. In other words, the deliveries to the other purchasers were during that entire year compared with the delivery to the Colorado Portland Cement Company for a period from November 5 to the end of that year?

A. With the possible exception of that not applicable to small users, but in the main that is correct.

Q. Now, state it for 1928.

A. In 1928 the volume sales to the Cheyenne Light, Fuel & Power Company was 290,053,000 cubic feet; to the distributing company at Fort Collins, 453,926,000 cubic feet. To the—

Mr. McCreery: Is that Mcf. or cubic feet?

The Witness: 453,926,000 cubic feet.

To the Colorado Portland Cement Company, 1,298,567,000 cubic feet; to miscellaneous main line customers, 9,411,000 cubic feet, or a total of 2,051,957,000 cubic feet.

The sale to the Colorado Portland Cement Company previously mentioned in that year represents approximately 63 per cent of the total sales.

By Mr. Lange:

Q. Now, Mr. Hancock, with reference to the—

Mr. McCreery: May I interpose one question for the sake of clarity?

Mr. Lange: Surely.

Mr. McCreery: All gas deliveries in those two years were from the Wellington field, were they, Mr. Hancock?

The Witness: They were.

By Mr. Lange:

Q. When did delivery from the Wellington field cease?
A. The last delivery was in 1937.
Q. 1937?
A. Yes.
Q. Now, for the year 1929, give us those same figures, please.
A. In 1929 the sale to the Cheyenne Light, Fuel & Power Company was 382,283,000 cubic feet; to the distributing company at Fort Collins, 496,197,000 cubic feet; to the distributing company at Boulder, 21,490,000 cubic feet; to what I refer to as the Denver fringe district on the west side of Denver, 832,000 cubic feet; to the Great Western Sugar Company, 10,932,000 cubic feet; to the Colorado Portland Cement Company, 696,891,000 cubic feet; to miscellaneous main line customers, 10,615,000 cubic feet, making a total for all sales of 1,619,240,000 cubic feet.

The percentage which the sale to the cement company bears in relation to the total sales is approximately 43 per cent.

Q. The delivery to the Great Western Sugar Company was commenced at what time?
A. On November 30, 1929.
Q. And the town border service at Johnstown commenced when?
A. July 24, 1930.
Q. Now, again referring back to that calculated total investment made in your Exhibit No. 117, Mr. Hancock, I believe you stated yesterday that the method of calculating the allocations was carried out by Mr. Willard, or what fashion was that material delivered to you, and by whom?
A. The amount of the investments in the various lines

and the amounts of the organization and other known physical costs were furnished to me by Mr. Willard, and the computations to which I testified to yesterday were made by me or under my direction.

Q. With reference to this information furnished to you by Mr. Willard, did you make any independent investigation of your own on that or what did you do, if anything?

A. No, sir, I accepted the plant and investment data furnished to me by Mr. Willard.

Q. Will you read this letter from the Colorado-Wyoming Gas Company into the record?

Mr. McCreery: Please let me see the letter.

Mr. Lange: Surely.

(The document referred to was passed to Mr. McCreery.)

By Mr. Lange:

Q. Who is that letter from, Mr. Hancock?

A. From the Colorado-Wyoming Gas Company, 407 Continental Oil Building, Denver, Colorado, and is signed by Mr. H. P. Davis, Secretary.

Q. And that is addressed to whom?

A. It is addressed to the Federal Power Commission, Central Savings Bank Building, Denver, Colorado.

Q. And bears what date?

A. November 7, 1939.

Q. Will you please read that letter?

A. Yes.

"Federal Power Commission, Central Savings Bank Building, Denver, Colorado

"Gentlemen: Att'n: Mr. K. L. Smith, Examiner

"At the time of constructing our main line from Denver to Ft. Collins, Public Service Company of Colorado specifically requested that we include sufficient capacity in our lines to enable us to serve gas to Valmont plant. This involved changes in our construction from Arvada to Valmont Junction.

"1. Increase proposed 8-inch line from Arvada station to Boulder Junction to 10-inch size.

"2. Increase proposed 6-inch line from Boulder Junction to Valmont Junction to 8-inch size.

"The cost of this additional capacity installed in our lines under the expectation that we would be able to sell them approximately 1 billion cubic feet of gas annually was estimated by our engineers at $60,800. In addition to the above it was necessary that we construct a branch from the Boulder line to Valmont and a measuring station at the terminal. This latter branch and station shows a job order cost of $17,223, making a total investment of approximately $78,000.

"As stated above, we contemplated a load of 1 billion cubic feet annually, and, based on this volume it was determined that the business could be handled at a profit if the gross return to us was not less than 2.3 cents per Mcf. exclusive of cost of gas purchased. This was computed as follows:

"4 per cent depreciation on $80,000	$ 3200
"6 per cent return on investment	4800
"Compression costs on 1 billion feet estimated at 1 cent	10000
"Taxes, and other operating costs	5000
"Total	$23000

"Public Service Company of Colorado could not assure us of any continuity in their usage and declined to enter into any firm commitment for gas and up to 1936 this investment (made at their request), had not earned us a penny. At that time we insisted that a contract be entered into that would give us a fair return and depreciation on our investment. It was finally determined that in fairness to both parties they pay us a readiness to serve charge equal to depreciation and return or $8000 per year and we in turn would sell them such a quantity of gas as they care to use, up to 1 billion feet per year at a rate of 1½ cents above the price at which we might be able to purchase same from Colorado Interstate Gas Company. They could use this quantity of gas or none at all as they saw fit. The so-called 'nominal' price was mutually agreed as being the best price which we or either of us could obtain from the Colorado Interstate at such time and for such quantity as they might elect to use.

"We have no agreement with Colorado Interstate fixing the nominal price for Valmont gas. This must be bargained for separately whenever the Public Service Company notifies us that they wish to use. For deliveries made in 1939 we were able to secure a price of 9½ cents per Mcf., as evidenced by copy of attached letter from Colorado Interstate Gas Company dated May 10, 1939.

"Yours very truly,

"H. P. DAVIS (Signed), Secretary."

Q. Now, with reference to the agreement between Colorado-Wyoming Gas Company and Public Service Company of Colorado, being No. 9 in Exhibit No. 103, Page—rather, it is the second page of that beginning with this paragraph, Paragraph "Third" at the top of the page:

"Vendee agrees to • • •"—strike that.

"Vendee • • •"—that would be the Colorado-Wyoming Gas Company—

A. That would be the Public Service Company of Colorado.

Q. "• • • agrees to pay vendor • • •"—the Colorado-Wyoming Gas Company—"• • • for the readiness to serve provided under this contract a customer charge of eight thousand dollars ($8,000) per year applying against the fixed charges on that part of the vendor's investment which was made for this purpose."

You are familiar with that portion of the agreement, Mr. Hancock?

A. Yes, sir.

Q. And also with the contents of that letter from the Colorado-Wyoming Gas Company?

A. No, sir.

Q. All right, is that the first time you knew of the facts set forth in that letter?

A. No, I knew of the facts but I didn't know of the letter.

Q. Well, what consideration did you give those facts?

A. I knew the facts and gave them due consideration.

Q. In connection with this exhibit you have prepared, Exhibit No. 117?

A. Yes, sir.

Q. And also in connection with the allocation factors that you have just related?

A. Yes, sir. I can give my reasons if you care for them.

Q. Yes.

A. My conclusion was that while this letter and the contract recites the facts which existed at the time of the construction, not necessarily at the time of the execution of the contract with the Public Service Company of Colorado Valmont plant, my conclusion was as follows:

That in view of the rapid growth of the load of customers to whom gas is sold for resale, as well as to a limited extent to public authorities, I wish that we had made similar contracts with other customers which would have resulted in more capacity in the main lines actually used now for sale and resale. In other words, I think it was a fortuitous circumstance which resulted in the installation of the additional capacity. If it had not been installed at that time the load could not have been handled as it actually had been handled.

Q. And you are still definitely of the opinion that the method that you have in that exhibit is the proper one?

A. Yes, the method being that the investment solely dedicated to the use of the Valmont plant is deducted; further, that we have also deducted, as testified to yesterday, that portion of the investment in the 10-inch, 8-inch, and 6-inch main line, which is used on peak days for service to public authority customers on a somewhat theoretical basis. In other words, it only amounts to about one per cent of the investment in that line and obviously it would be impossible if the sale for resale customers were only served to make any reduction whatever in the investment required to service those customers.

Hence, if service was contemplated only to the sales for resale, those lines would need to be constructed exactly as they are.

Q. Now, you know, of course, that this contract between Colorado-Wyoming Gas Company and Public Service Company of Colorado is dated December 31, 1935, and is provided to continue in force until October 3, 1949?

A. That is right.

I would like to also point out, if I may, that there is no obligation to deliver gas on peak days; that there is no intention of using any portion of the main line capacity when that gas is needed for delivery to sales for resales and public authorities, and that is the way it actually works out under actual operating conditions.

(Vol. 28, pp. 3832-3842.)

* * * * *

Q. I see. Now, this service to Colorado Portland Cement Company has been of considerable volume as indicated by your figures for 1928 and 1929 as well as those in the exhibit of Mr. Davis, 105, and that service has been maintained pretty steadily by the company, hasn't it?

A. It has fluctuated from year to year.

Q. I mean insofar as continuity of service and lack of interruptions wherever possible is concerned.

A. It has been maintained at all times when the Colorado Portland Cement Company desired gas and when the Colorado-Wyoming Gas Company was able to furnish it.

Q. Do you know anything about a reference in Work Order No. 145, December 21, 1938?

A. No, sir.

Q. Read that, please.

A. This is what the sheet says:

"No. 145; Date, December 21st, 1938; estimated cost by accounts: Compressor stations, $988, Dr.; Compressor stations, $360, Cr.; Replacement reserves, $306, Dr.; Replacement reserves, $64, Cr.; Total, $924.

"Description: Equipped four compressors at Arvada station with unloading valves. There are six compressors at this station, two of which were supplied with unloading valves when new Class A cylinders were purchased two years ago. This requisition is to provide unloading valves for the other four compressors.

"Benefits, Etc.: Fuel saving of $150 per year in addition to retaining the load of the Cement plant which nets approximately $20,000 annually. Uninterrupted service to the Cement plant is very essential."

Q. The Cement plant referred to is the Colorado Portland Cement Company?

A. I believe it is.

Mr. Lange: Now, I don't know whether this is an accurate transcription of the voucher. We desire to supply an accurate transcription of that voucher—the job order, rather.

Mr. McCreery: Will you give us the number, please?

Mr. Lange: No. 145. And when that original is available, we desire—

Mr. McCreery: We'll have that after lunch.

Mr. Lange: We then desire to—

The Trial Examiner: I didn't hear your remarks, Mr. McCreery.

Mr. McCreery: I think we can have that here for Mr. Lange after lunch.

Mr. Lange: At that time, then, we will offer it.

Mr. McCreery: Do you want it as an exhibit? It is already read in the record.

Mr. Lange: Well, if it is correct as read, why, we need—

Mr. McCreery: Well, that is subject to comparison, and just leave it for that purpose.

Mr. Lange: We will offer it as it has been read, subject to any correction.

Mr. McCreery: That will be simpler, I think. I have no objection.

By Mr. Lange:

Q. Now, Mr. Hancock, what is the percentage of the total main line industrial load to the resale load for the year 1939?

Mr. McCreery: In volume or dollars?

Mr. Lange: In Mcf.

The Witness: May I have that question, please?

(The question referred to was read by the reporter, as set forth above.)

The Witness: That percentage don't mean anything to me. It involves different things. Now, may I make a suggestion?

By Mr. Lange:

Q. Yes.

A. You want the percentage of the industrial main line load to the total?

Q. To the total.

To the total sales?

Q. That's right.

A. For the year 1939 the industrial and main line direct sales volume was approximately 48 per cent of the total sales volume.

(Vol. 28, pp. 3849-3852.)

* * * * *

The Trial Examiner: Mr. Hancock, does the record reflect the peak day capacity of this line in 1940 and the peak day demand of the resale customers?

The Witness: The peak day demand on January 18, 1940, was $11,646,000. On that day the peak day delivery to sale for resale customers is 10,191,000. During that day for just portions of the day there were small deliveries to certain of the industrials, but not for the entire day, which accounts for a small delivery to the industrials on that day.

In November 1940 the peak day demand was 15,817,000, which so far as I know is the highest peak ever experienced and it is my information that on that day the industrials were all off for a substantial part of the day, as stated in regard to the Cement plant, some seven to nine hours, but that being such a recent peak the data pertaining to it has not been available in all respects.

The Trial Examiner: Now, what was your peak day capacity for the year 1940, Mr. Hancock?

The Witness: Both at the time of the January 18, 1940 peak and the November 1940 peak. I would regard the system as fully loaded at both of those times.

The Trial Examiner: So that your peak day capacity on those days approximately equalled your peak day demand?

The Witness: The peak day demand represented all of the gas that the line was capable of delivering under the operating conditions at that time.

The Trial Examiner: Well, now, the construction of this Arapahoe station—

The Witness: Yes, sir.

The Trial Examiner:—that will add some peak capacity to the line, will it not?

The Witness: Yes, sir.

The Trial Examiner: At the time that it is completed.

The Witness: Yes, sir.

The Trial Examiner: When will that be completed?

The Witness: It is now practically completed.

The Trial Examiner: Do you have any information as to—

Mr. McCreery: That is the first unit, is it not?

The Witness: The first unit is practically complete.

The Trial Examiner: What do you contemplate there? How many units?

The Witness: There is now one 600-horsepower unit and it is contemplated that in 1941 another 600-horsepower unit will be added.

The Trial Examiner: Well, have you made any calculation as to what your peak day capacity might be subsequent to the installation of those two units in the Arapahoe station?

The Witness: Yes, sir. After the second 600-horsepower unit is installed, making a total of twelve hundred horsepower installed, and based on 50-pound intake pressure which is the minimum pressure specified in the purchase contract, and with 175 pounds discharge from that station, the station will have a capacity of 15,100,000.

The Trial Examiner: Well, now, let's see. Where is the location of that station?

The Witness: That is practically at the beginning of the Colorado-Wyoming Gas Company line south of Denver.

I am afraid my statement is a little confusing as to why that is lower than the actual peak experience already had.

The Trial Examiner: Will you explain that, please?

The Witness: The difference comes about from the actual delivery pressures which have been in the past higher than the contract pressure. Now, instead of the 50-pounds intake pressure which I used in the foregoing statement, if due to a fortuitous circumstance we would obtain 75 pounds delivery pressure from the Colorado Interstate Gas Company, the capacity in that even with 175 pounds discharge would be 21,200,000; so the 21,200,000 is comparable to the 15,000,000 actual peaks that I have testified to, but if the delivery pressure of Colorado Interstate Gas Company drops to the amount which they are obligated to give us, then we will need the 1200-horsepower capacity station to just practically deliver what our past peaks have been.

The Trial Examiner: Well, what is your present delivery pressure?

The Witness: It varies through very wide limits. During the peak of January 18, 1940, which I referred to, the delivery pressure went to 71 pounds, which I believe is the lowest to which it has gone. Ordinarily it is considerably in excess of that; in fact, it is in excess of 100 to 150 pounds, but that one day's circumstance which is largely governing in the whole calculation.

The Trial Examiner: Yes, but 71 pounds is the lowest that you have had on your peak day demand?

The Witness: Yes, sir.

(Vol. 28, pp. 3857-3860.)

* * * * *

Mr. McCreery: In connection with the matter read into

the record this morning from what was designated as 145, which is really requisition No. 45, there seems to be some difference in the language employed and in the statements made.

I have prepared copies of all of the language which was referred to, having been taken from the original requisition, and perhaps the simplest way would be to offer the corrections for the record. Would that be all right?

Mr. Lange: Yes, sir.

Mr. McCreery: In that way would it be necessary to furnish it in exhibit form or could it be read into the record?

The Trial Examiner: I think it could be read into the record.

Mr. McCreery: Could it be assumed it was read in or should I read it?

The Trial Examiner: I think the reporter might just copy it in. You have the original there so that the Commission's counsel can compare it.

Mr. McCreery: I brought it for comparison if they desire to examine it.

The Trial Examiner: Yes. I will direct the reporter to copy it into the record as having been read.

(At the direction of the Trial Examiner, the following was copied into the record:)

"Location and Description of Work:

"To equip four compressors at our Arvada Station with unloading valves. There are six compressors at this station, two of which were supplied with unloading valves when new Class A cylinders were purchased two years ago. The other four have no means of unloading now, and this requisition is to provide unloading valves for those compressors.

"Necessity:

"Our loads have increased to the place where discharge pressures of 325 pounds are necessary most of the winter months. Our engines can operate against this pressure if

suction pressures can be maintained above 200 pounds, but stall when suctions get below that point unless the suction is cut to about 70 pounds. These lower pressures cut their capacities to a point where the entire output of the plant is insufficient to supply our demands and necessitates cutting off industrial loads during peaks. This causes dissatisfaction which is apt to lose us some of our best customers.

"The unloading valves enable us to operate with suction pressures of 150 pounds to 170 pounds which are the prevailing pressures, and doubles the capacity of the compressors.

"Benefits:

"Through the use of unloading valves we will be able to operate with fewer engines and a resultant fuel saving of about $150 per year. In addition to this saving we will be in a position to retain the Cement plant load which nets us roughly $20,000 annually. They claim that shut downs cost them about $200 each and that uninterrupted service is very essential. They are already equipped to burn powdered fuel and unless our service is maintained at a high standard we are apt to lose this load."

Whereupon Harry D. Hancock, the witness on the stand at the time of adjournment, having been previously duly sworn, resumed the stand and testified further as follows:

Redirect Examination.

By Mr. McCreery:

Q. Before the recess at noon, Mr. Hancock, certain inquiries had been made to you from Mr. Lange asking for information. Do you have the information available now which he requested?

A. Yes.

Q. Will you please give it to him?

A. Yes. The question was asked as to the extent of industrial gas sales for resale which was cut off on January 18, 1940. I find that in consulting my notes that in addition to the main line industrial customers, whose service was discontinued on that day, that the industrial sales for resale were cut off on both January 18 and January 19;

January 18 to the extent of 705,000 cubic feet, and on January 19 to the extent of 164,000 cubic feet.

The next question was as to what customers other than the Cement Company was cut off on November 12, 1940. I don't believe I stated it was November 12, but I believe I stated that it was in November, 1940, and I now find that it is November 12, 1940. The Cement plant was the only industrial customer cut off on that day, it being cut off between 9:00 and 10:00 p. m., on November 12 and remaining off until 8:00 a. m. on November 13.

The next question was—

The Trial Examiner: Just a moment, Mr. Hancock.

Mr. Lange, do you have any questions with regard to those cut-offs? Do you have any cross examination on that?

Mr. Lange: No, not on those.

The Witness: The next question was whether or not the Cement plant was operating on December 26, 1938. I stated that it was cut off and I wish to correct that statement. The Cement plant was actually operating at that time and was not cut off. The reason why it was not cut off, even though it was a peak day, was that the pressures delivered by Colorado Interstate Gas Company ranged from a minimum of 129 pounds to a maximum of 258 pounds, thereby providing sufficient gas to make it unnecessary to discontinue service to the Cement plant on that day.

The next question was in regard to earlier interruptions to industrial deliveries than those which I have mentioned in previous testimony. I have already mentioned the—strike that. In July 1932 at the time of the Jimmy Creek washout, all of the industrial customers were affected, although domestic service was maintained by resorting to gas in storage in the fine. The Cement plant was operating at that time and having been shut down it stayed down for a month.

By Mr. McCreery:

Q. The shutdown was occasioned by the shutoff?

A. The beginning of the shutdown was occasioned by the shutoff.

In the fall of 1934 all industries were required to discontinue the use of industrial gas for a period of about eight hours, however, at that time the Cement plant was not running. Slightly later, in the same year 1934, there was a further period of industrial gas delivery shut off for about eighteen hours at which time the Cement plant had been running and shut off, including the sugar plant.

In May 1935 there was a 28-hour shutoff period of all industrials, however, at that time the sugar plant was not operating.

In December 1935 there was a 5-hour period of outage on certain customers occasioned by a line of the Colorado-Wyoming Gas Company being broken by a blast. I assume that was in road construction work or some other type of construction work.

Recross Examination.

By Mr. Lange:

Q. Were those the main line industrials that you have referred to?

A. That is right. The most important one affected at that time was the sugar plant, it being off five hours.

On February 5, 1937, due as we were informed to a stoppage of the main line of the Colorado Interstate Gas Company or lines which supply the Colorado Interstate Gas Company of which I am not sure, as the result of hydrate stoppage in those lines all of the industrial customers were off for a period of sixteen hours. However, domestic service was maintained.

Q. Was any resale industrials maintained?

A. During a portion of the period the industrial deliveries for resale were only off for ten hours instead of the sixteen hours referred to on the main line industrials.

On February 9, 1937, due to a line being broken by a blast, all of the industrials were reduced in deliveries for a period of eight hours.

Q. You mean the main line industrials?

A. That is right.

Q. And in what way were the resale industrials affected?

A. Only for a period of three hours. The Cement plant, however, was not running in February at that time.

In the latter part of May, 1937, and the early part of June, 1937, due to a washout at the Little Perico in Texas, all main line industrial customers were off for a period of three and one-half days.

The industrial sales for resale were off for three days at that time. Domestic service, however, was maintained.

That, I believe, brings the interruption record down to date with the exception of a few minor interruptions purely local in character, such as the particular supply line being torn out by road construction work or items of that kind. In one case a truck load of cattle had its brakes become inoperative and the whole load of cattle ran into a measuring station and broke the lines. Aside from minor incidents of that kind, I believe I have named the major interruptions.

Q. I forgot to ask you, Mr. Hancock—if I might interpose right here—

A. I had one other—or, it's all right.

Q. Were there any interruptions at all in any domestic service since 1929?

A. The only interruption which comes to my mind, and it is not a total interruption, is a slight reduction in pressure in certain parts of Cheyenne during the January 1940 peak day. The town border pressure there with all industrials off and with even the high school building in Cheyenne off for heating purposes, there was a few customers affected at that time.

Q. All right, you had another item there.

A. Now, Mr. Gray asked a question as to the delivery pressures by the Colorado Interstate Gas Company on the day of the November 1940 peak day which was, as previously testified, on November 12, 1940, and on which day it was necessary to discontinue service to the Cement plant. The minimum pressure received from Colorado Interstate Gas Company on that day was 147 pounds, the pressure going as high as 217 pounds, which rather high pressure condition explains why all industrials did not have to be cut off.

(Vol. 28, pp. 3872-3880.)

Q. And you have assumed in connection with this investment that if a company were to construct a 6-inch main line from Arapahoe to Cheyenne that this would in your opinion be the estimated investment in such a line?

A. Yes.

Q. Both the plant and investment as well as the depreciated cost of such?

A. Yes.

Q. The depreciated cost of which would be $833,173?

A. That is right.

Q. As of the year 1930?

A. Is that a question?

Q. Yes.

A. I wouldn't say the depreciation would be the—that the depreciated plant and investment would be that amount as of the year 1930, but if these lines had been built as described in these years covered by this construction period, I believe that would closely represent the present depreciated plant and investment account.

Q. Of course, such a line does not in fact exist at the present time?

A. By no means.

Q. And you are not contemplating the construction of such a line for the company, are you, Mr. Hancock?

A. Not to my knowledge.

Q. Now, is the company contemplating the construction of such a line?

A. Not to my knowledge.

(Vol. 28, pp. 3922-3923.)

* * * * *

In the testimony of H. P. Davis, Secretary of Colorado-Wyoming Company (Vol. 83, pp. 12,427, 12,428) and in Exhibit 242 introduced by him, appears the following identification of the contract and franchise provisions stipulating priority of domestic users over industrial users:

"Preference for domestic users and 'cut off' or 'shut off' of industrials if necessary, to supply the demands of domestic users is a fundamental characteristic of the Colorado-Wyoming Gas Company system and of its operations. Such preference and 'shut off' is provided and

required in several ways; and as shown by sundry contracts in evidence in this case:

1. Contract between Colorado Interstate Gas Company and Colorado-Wyoming Gas Company.

2. Contracts between Colorado-Wyoming Gas Company and Public Service Company of Colorado.

3. By virtue of the respective contracts between Colorado Interstate Gas Company and Public Service Company of Colorado, Pueblo Gas and Fuel Company and Colorado-Wyoming Gas Company the cities of Denver and Pueblo are given priority over Colorado-Wyoming Gas Company.

4. The various franchises to the distribution company granted in Arvada, Berthoud, Boulder, Fort Collins, Golden, Greeley, Johnstown, Loveland, and Longmont, Colorado, to supply natural gas purchased from Colorado-Wyoming Gas Company in the cities and towns named, all provide for such preference 'cut off' or 'shut off' in substantially the same language as follows:

> 'The rates to be charged by the company for natural gas service to industrial users for heating, manufacturing, power and other purposes, may be lower and different from those charged for domestic purposes, and the company may contract with industrial users for the sale of such natural gas, provided that all such contracts contain a "cut off" clause which shall recognize the preferred rights of domestic users over industrial users.'"

In all its sales contracts, Colorado Interstate Company has provisions giving preference to domestic over industrial consumers (Ex. 7 D, 7 E, 7 H, 7 I, 9, 25, 39), in substantially the same language embodied in the sales contract of Colorado Interstate Company with Colorado-Wyoming Company. (Ex. 101, pp. 13-14), the pertinent provision of which is as follows:

> "It is agreed that in case of shortage either temporarily or permanently, of natural gas and necessity for curtailment of service to any classes of consumers, the demands of domestic consumers of the Seller, the Buyer and/or of

other distributing customers to which the Seller or Buyer may sell natural gas, are to be preferred over service to industrial consumers, and of the amount remaining, deliveries, if any, for industrial consumers served by the Buyer shall be such part as the requirements of such industrial consumers bear to the requirements of industrial consumers of the Seller, the Buyer and of other distributing customers to which the Seller may sell natural gas; provided, however, that such domestic consumers' preference and such right to receive natural gas for industrial users shall not be exercised so as to deprive the Colorado Fuel & Iron Company of the volume of natural gas needed to complete open hearth heats then in jeopardy and to keep its furnaces warm during extreme domestic demand upon the Seller's pipe line, or so as to deprive any other industrial or commercial consumer which requires a small proportion of its normal demand to prevent damage to its appliances."

(6) *Shut-offs and Curtailment of Industrial Service.*

"Shut-off" or "curtailment" of both direct main line industrial consumers and of indirect industrial customers served under resale contracts of distributing companies, in order to satisfy the demands of domestic consumers, have occurred most frequently in the years 1938, 1939 and 1940.

Hancock testified specifically with respect to the reason for interruption of industrial service as follows:

"They were cut off, asked to discontinue, because of the requirements of other customers, domestic house heating customers of the companies to whom gas is sold by Colorado-Wyoming Gas Company."

(Vol. 28, p. 3842.)

He further testified:

"In July, 1932, at the time of the Jimmy Creek washout, all of the industrial customers were affected, although domestic service was maintained by resorting to gas in storage in the line. The cement plant (at Laporte) was operating at that time, and having been shut down it stayed down for a month (Vol. 28, p. 3876).

In the fall of 1934 all industrials were shut off for a period of about 8 hours, at which time the cement plant was not running. A little later in the same year there was a further period of shut-off of industrials for about 18 hours, at which time the cement plant had been running and was shut off as was also the sugar plant of the Great Western Sugar Company at Johnstown, Colorado. In May 1935, there was a 28-hour shut-off of all industrials, the plant of the Great Western Sugar Company not being in operation at that time however (Vol. 28, pp. 3876, 3877).

February 5, 1937, due to a stoppage of the main line of Colorado Interstate Company, all industrial customers were cut off for a period of 16 hours; domestic service, however, was maintained. During this cut-off the industrial deliveries under resale contracts were shut off for only 10 hours, as compared to the 16-hour shut-off of main line direct sale industrials. On February 9, 1937, due to a line break occasioned by a blasting, main line industrial deliveries were reduced for a period of 8 hours and industrials under resale contracts for a period of 3 hours. At this time the cement plant was not running (Vol. 28, pp. 3877, 3878).

In May and June, 1937, due to a washout on the Texas line south of Denver; all main line industrial customers were cut off for three and one-half days. Domestic service, however, was maintained (Vol. 28, p. 3878). Main line industrials were cut off on December 26, 1938, at which time the cement plant was being operated and was not cut off because delivery pressures were from 129 pounds to 258 pounds (Vol. 28, pp. 3847, 3848, 3874, 3876, 3880).

On February 9, 1939, service was curtailed to the industrials (Vol. 81, p. 12,068).

On January 18th and 19th, 1940, all main line industrials were shut off and resale industrials were curtailed January 18th, to the extent of 705 M. c. f., and on January 19th to the extent of 164 M. c. f. (Vol. 28, pp. 3843, 3875; Vol. 81, p. 12,066).

With reference to the foregoing, on cross-examination, Mr. Hancock testified:

"Q. What was the nature of that and why was the service interrupted?

"A. Peak loads on the system, wholly due to sales for resale and public authority customers. All industrial customers were cut off.

"Q. What was the length of that interruption?

"A. I cannot give you that length of interruption in hours but I can say that on that day that all of the main line customers were cut off early in the morning and by noon or early afternoon that cut-off was extended to the small industrial customers served even by distributing companies."

(Vol. 28, pp. 3843, 3844.)

On November 12, 1940, the cement plant was cut off from 9:00 A. M. to 10:00 P. M., and remained off until 8:00 A. M. on November 13th. No other industrials were cut off on that day (Vol. 28, pp. 3842, 3875, 3879).

Deliveries to the cement plant were shut off December 12th from 9:00 P. M. until 8:00 A. M. the 13th, 1940, to protect the Cheyenne service. The curtailment was 1200 M. c. f. (Vol. 81, pp. 12064, 12065).

Upon cross-examination (Vol. 28, p. 3845) he stated:

"Q. Are these interruptions that you are speaking of all involuntary as to all parties concerned—all purchasers?

"A. They are unavoidable. The customers don't desire to be interrupted but it is necessary that they be interrupted and they have agreed that they can be interrupted.

* * * * *

"Q. Is it not a fact, Mr. Hancock, for the purpose of satisfying the priority demands of this Cheyenne service that industrials were cut off last night on this line?

"A. That is true.

"Q. Including the Colorado Portland Cement Company?

"A. That is true. The peak day requirement is the determining factor. If Cheyenne needs so many million feet of gas on the peak day, that portion of the system's capacity has to be dedicated to that capacity and can be sold to no one else.

"Q. That was done last night?
"A. Yes."

(Vol. 29, pp. 3956, 3957.)

"Q. Mr. Hancock, you stated that the service for the cement plant was interrupted yesterday (December 12, 1940). Was it cut off entirely or just reduced?

"A. It was off at 5:30 o'clock p. m., yesterday afternoon except that they were notified that they could use temporarily a small amount of gas just to keep the kilns hot. It was on again at 10:15 p. m. but they did not resume full load conditions until 1:00 a. m.

"Q. You mean the Cement plant voluntarily did not resume full load condition?

"A. No, they did not restore their full heat until that time.

"Q. They could not?

"A. And it was again curtailed but not fully cut off at 9:30 this morning.

"Q. At what pressure was gas delivered to your company yesterday by the Colorado Interstate Gas Company?

"A. I have not been able to secure those pressures but the pressures at Arvada station intake were comparatively high all day and all night, the necessity of cutting the Cement plant off being entirely the transmission facility situation between Arvada station and the 6-inch line north of Fort Collins from which the Cement plant receives its supply.

"Q. It was not due to any low pressure gas at the point of delivery to your company?

"A. I do not believe it was, because at 5:00 o'clock yesterday afternoon, just before the cement plant was required to shut off, the Arvada suction pressure was 167 pounds which would indicate a considerably higher pressure at the Arapahoe measuring station.

"Q. Was any resale industrial cut off?

"A. No, sir.

"Q. What was the pressure at the point of delivery at Cheyenne yesterday?

"A. At 5:00 o'clock the town border pressure was 56 pounds; at 6:00 o'clock it had dropped to 40 pounds; at 6:30 o'clock it had dropped to 16 pounds. It was back to 137 pounds this morning at 8:00 o'clock. At the time when the

pressure was low at Cheyenne, as just mentioned, all four compressing units at the Wellington station were operated.

"Q. Was the Arapahoe compressor station operated?

"A. It was. —Pardon me, it was not. I had the Arvada station in mind when I answered you.

"The Arapahoe station was not operating. Under the conditions of pressure delivery from Colorado Interstate Gas Company it was not necessary to operate the Arapahoe station during the period I referred to.

"Q. But the other two stations were?

"A. They were.

"Q. Were all units of the two stations in operation?

"A. All units at the Wellington station were operating; four units at the Arvada station were operating during the evening hours yesterday; two units at Arvada were operating during the early morning hours and four units again this morning."

(Vol. 29 pp. 3966-3968.)

Again (Vol. 28, p. 3879) under cross-examination, the witness testified:

"Q. Were there any interruptions at all in any domestic service since 1929?

"A. The only interruption which comes to my mind, and it is not a total interruption, is a slight reduction in pressure in certain parts of Cheyenne during the January 1940 peak day. The town border pressure there with all industrials off and with even the high school building in Cheyenne off for heating purposes, there was a few customers affected at that time."

(See Vol. 81, p. 12,062.)

Mr. Hancock also testified with respect to the growth of peak-day demands (Vol. 28, pp. 3868-3869):

"Q. Do you know whether or not it is a fact that there have been very definite and emphatic protests and objections by certain industrial users even with respect to the infrequent interruptions which ha e taken place in their use?

"A. I do.

"Q. In relation to what companies in particular?

"A. Particularly the Great Western Sugar Company.

"Q. At Johnstown.

"A. At Johnstown.

"Q. Is it not a fact, Mr. Hancock that in the period from 1939 to 1940 the substantial increase and anticipated total volume of sales for resale will definitely increase in higher peak day demands from year to year under normal weather conditions?

"A. That is true. Much of the added business is of a peak load nature."

The Commission's witness, Claude Lester, offered certain exhibits (including Nos. 251, 307 and 308) and testified as follows:

CLAUDE R. LESTER called as a witness by and on behalf of the Federal Power Commission, bein first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Lange:

Q. Please state your name.

A. Claude R. Lester.

Q. Where do you reside, Mr. Lester?

A. I reside at Portland, Oregon.

Q. What is your occupation or profession?

A. I have followed the rate game and regulatory.

Q. Regulatory matters?

A. Yes, regulatory matters. I am a professional engineer in the state of Oregon, registered to practice there as well as a qualified engineer.

Q. By whom are you presently employed?

A. By the Bonneville Power Administration.

Q. How long have you been so employed?

A. Since the middle of May last year.

Q. 1940?

A. 1940.

Q. Were you ever employed by the Federal Power Commission?

A. Yes, I was employed by the Federal Power Commission before going to Bonneville.

Q. How long were you so employed?

A. For over a year.

Q. Have you prepared a written statement setting forth your experience and qualifications?

A. I have.

Q. Please read that into the record.

A. "In 1914 I graduated from the University of Michigan with a Bachelor of Electrical Engineering degree. While at the University I took advance courses in accounting and a course in 'Utility Regulations' given by Dean Cooley, and Professors Riggs and Friday.

"After receiving my degree I entered the employment of the Grand Trunk Railway as an electrician. As an employe of this company I assisted in construction of electrical transmission and distribution lines, installation and maintenance of electrical equipment under the Motive Power Department at the electrically operated shops at Toronto and Montreal, Canada, and Battle Creek, Michigan, and the power plant and transmission line at Fort Huron for the Serina Tunnel. I had charge of the evaluation of all electrical lines and equipment under the Motive Power Department of the Western Division of the Grand Trunk Railway pursuant to orders of the Interstate Commerce Commission.

"In 1917 I enlisted in the U. S. Army, serving with the Fifth U. S. Engineers. In France I had charge of the operation of the electrical light plant for the Seventh Division Headquarters and *intalllation* of other electrical light plants in our Army area.

"In 1919 I entered the employment of the United States Emergency Fleet Corporation in Portland, Oregon, as valuation engineer. The work consisted of the evaluation of surplus shipbuilding material, stores, and equipment.

"In 1919 I was employed as engineer by the Southern Pacific Company, and later by the Oregon-Washington Railway and Navigation Company to assist in bringing up to date the Interstate Commerce Commission's valuation pursuant to I. C. C. Order No. 4.

"In 1920 I was employed by the Public Service Commission of Oregon, the name of which was later changed to Public Utilities *Commissioner* of Oregon. During the seventeen

years in the State regulatory service I served as assistant engineer, engineer, auditor, principal engineer, chief engineer, and director of engineers. At first I assisted in the investigation of the books and operations of public utilities, valuations, and rate analyses. As chief engineer and director of engineers I had charge of valuations of public utility property and auditing of the public utilities' books. Also had charge of rate studies and preparations of factual evidence in formal proceedings before the Commission and charge of the studies of other problems confronting the engineering and auditing department of a state public utility regulatory body.

"In 1939 I entered the employment of the Federal Power Commission as associate rate investigator. Beside the rate analysis work in this case, I prepared rate analyses in a number of other natural gas *matter* for the Commission.

"In May 1940 I entered the employment of the Bonneville Power Administration at Portand, Oregon, as rate analyst. My work with the said Administration, at present, consists of analyses of various types of electric rates used by various private and public utilities and studies of additional use to which electric energy may be devoted.

"I am a registered engineer authorized to practice professional engineering in the State of Oregon, No. 1441."

Q. Mr. Lester, during the time that you were in the employ of the Federal Power Commission, what particular branch of the Commissioned service were you connected with?

A. With the rate department of the Federal Power Commission and in rate work and rate investigation.

Q. While you were employed, did you have any assignment in connection with the preparation of the study of the rates of Colorado-Wyoming Gas Company in this proceeding? Also of related matters to rates?

A. I did.

Q. Did you prepare an exhibit in connection with that study?

A. I did.

Q. I will ask you whether this is the exhibit.

A. That is the exhibit.

Mr. Lange: Will the reporter please identify it?

The Trial Examiner: What is the title of it, Mr. Lange?

Mr. Lange: "Report on the Review and Analysis of the Contracts, Rates and Billings of the Colorado-Wyoming Gas Company.

The Trial Examiner: It will be marked for identification as Exhibit No. 251.

(Exhibit 251, Witness Lester, marked for identification.)

By Mr. Lange:

Q. Mr. Lester, in connection with the preparation of that exhibit, have you prepared a written statement describing it and giving its essential parts?

A. I have.

Q. Will you please read that statement into the record?

A: "Operations—General.

The Colorado-Wyoming Gas Company, hereinafter frequently referred to as the Colorado-Wyoming Company, owns a pipe line system which begins at a point of connection with the Colorado Interstate Gas Company near Littleton, Colorado and extends north into the state of Wyoming to Cheyenne. Natural gas is sold from this pipe line at several city gates to other companies for resale and also directly to several large industrial customers for their own use.

The Colorado-Wyoming Company's main source of natural gas supply is the Colorado Interstate Gas Company. Small amounts of gas are purchased from the Goodstein Pipe Line Company. The gas which is purchased from the Colorado Interstate Gas Company is in turn purchased by that company from the Canadian River Gas Company and produced in the Texas Panhandle field. The small amounts of gas purchased from the Goodstein Pipe Line Company are produced by that company in the Berthoud, Colorado field.

The gas which the Colorado-Wyoming Company delivers to its customers is subject to the terms and conditions under which the company's supply of gas is received. It is to be

commercial gas as produced in its natural state, except that gasoline and helium may be extracted.

The Colorado-Wyoming Company's city gate sales and the general use made of the gas is set forth below. The contracts and supplements covering these sales, which were filed with the Commission pursuant to the Natural Gas Act, are listed in Table No. R-2.

(1) Gas is furnished to the Public Service Company of Colorado at the city gates of Fort Collins, Loveland, Berthoud, Johnstown, Longmont, Boulder, Brighton, Fort Lupton, Arvada, Golden and Denver Fringe, Colorado, for resale for domestic, commercial and industrial use.

(2) Gas is furnished at Cheyenne, Wyoming to the Cheyenne Light, Fuel and Power Company. This gas is for general distribution purposes and also for use in the purchaser's Power Plant.

(3) Gas is furnished at Greeley, Colorado to the Greeley Gas and Fuel Company. This gas is for general distribution uses in the town of Greeley.

(4) Gas is furnished near Loveland, Colorado to the Highway Gas Company. This gas is for resale to certain rural customers of the purchaser.

The industrial companies to who the Colorado-Wyoming Company sells gas and the general use made of the gas are shown below. The contracts covering these sales are listed in Table No. R-3.

(1) Fort Collins Producing Corporation near Fort Collins, Colorado—for oil drilling operations during times when the purchaser is unable to produce sufficient gas from the Wellington field.

(2) Adolph Coors Company, near Golden, Colorado—for fuel requirements in malt driers and pitch burners and for other uses at the purchaser's brewery.

(3) Golden Fire Brick Company, near Golden Colorado —for kiln fuel and incidental plant use.

(4) Denver Pressed Brick Company, five miles west of Loveland, Colorado—for kiln fuel and incidental plant use.

(5) Great Western Sugar Company, Johnstown, Colorado—to supplement fuel requirements.

(6) Colorado Portland Cement Company, Laporte, Colorado—for use incidental to the manufacture of cement, including kilns and driers to the exclusion of all other fuels.

(7) Kuner-Empson Company, near Brighton, Colorado—for boiler fuel and incidental plant uses.

(8) Producers Canning Company, Fort Collins, Colorado—for general industrial use in the purchaser's canning plant.

(9) Public Service Company of Colorado, Valmont, Colorado—for boiler fuel and incidental plant use. This service is to be ready for use on not more than 60 minutes' notice in case of emergencies.

(10) Denver Board of Water Commissioners, Jefferson County, Colorado—for boiler fuel and general plant use.

(11) United States Government, Fort Logan, Colorado, Fort Francis E. Warren, Wyoming and the Federal Correctional Institution near Fort Logan.

This review and analysis shows that generally the Colorado-Wyoming Company holds itself out to supply gas under its sales contracts:

'to the full extent that it may be able to do so through the exercise of reasonable care and diligence in the procuring of natural gas from its purchase contracts, and in the transportation thereof through its pipeline to the point of delivery and at such pressures and for such period of time as natural gas is available.'

Table No. R-4 shows sales data for the calendar years 1937, 1938 and 1939. These data by class of service and for each delivery point are:

(1) Quantity of gas sold at the selling pressure base and at a uniform pressure base of 14.65 pounds per square inch.

(2) Revenues received.

(3) Load factor.

(4) Average revenue per MCF at the selling pressure base and at a uniform pressure base of 14.65 pounds.

(5) The ratio of the volume sold at each delivery point to the total volume sold.

(6) The ratio of the revenue received at each delivery point to the total revenue received.

Summarized by class of service the information shown by Table No. R-4 is: MCF at 14.65 pounds per square inch.

	Price Cents/MCF	Quantity % of Total	Sales Revenues % of Total
		1937	
Domestic Gas	44.62	37.80	52.59
Industrial City Gate	26.84	13.44	12.32
Total City Gate	39.96	51.24	39.91
Main Line Industrial	18.09	48.45	29.93
General Pipe Line Delivery	14.77	.31	.16
Total	29.29	100.00	100.00
		1938	
Domestic Gas	43.93	42.50	60.93
Industrial City Gate	26.79	14.23	12.45
Total City Gate	39.63	56.73	73.38
Main Line Industrial	18.88	42.96	26.47
General Pipe Line Delivery	14.91	.31	.15
Total	30.64	100.00	100.00

	1939		
	Price Cents/MCF	Quantity % of Total	Sales Revenues % of Total
Domestic Gas	43.86	38.76	58.58
Industrial City Gate	26.57	12.29	11.25
Total City Gate	39.69	51.05	69.83
Main Line Industrial	17.89	48.79	30.08
General Pipe Line Delivery	14.92	.16	.08
Total	29.02	100.00	100.00

During the year 1939 the city gate sales amounted to 51.05% of the total volume of gas sold and 69.83% of the total revenues received. During the same period the main line industrial sales were 48.79% of the total volume sold and only 30.08% of the total revenues received.

On the uniform pressure base of 14.65 lbs. the price paid during 1939 for domestic and space heating gas by the three largest distributing customers of the Colorado-Wyoming company was:

	First Block of Domestic Rate Cents per MCF	Last Block of Domestic Rate and Space Heating Rate Cents/MCF	Average Revenue Cents per MCF
Public Service Co. of Colo.	46.20	41.56	43.17
Greeley Gas and Fuel Co.	46.36	41.72	44.17
Cheyenne Light, Fuel & Power Co.	47.64	42.88	44.89

The Cheyenne Light, Fuel and Power Company is paying more per MCF for the gas which it resells to commercial and industrial consumers. The comparative average revenues paid during 1939 are:

	Average Revenue for Commercial and Industrial Gas
Public Service Company of Colorado	24.50c per MCF
Greeley Gas and Fuel Company	35.87c per MCF
Cheyenne Light, Fuel & Power Company	36.04c per MCF

The Colorado Portland Cement Company is the main line industrial customer of the Colorado-Wyoming company farthest from the source of supply. However, this company pays the lowest average main line industrial price for its gas. The comparative average revenues from main line industrial customers for the year 1939 are:

At 14.65 pounds per square inch

	Average Revenue Cents/MCF
Denver Board of Water Commissioners	24.86
Adolph Coors Company	22.46
Golden Fire Brick Company	18.95
Public Service Company of Colorado	42.70
Kuner-Empson Company	23.74
Great Western *Sugas* Company	21.83
Denver Pressed Brick Company	21.63
Colorado Portland Cement Company	14.10
Producers Canning Company	44.28
Continental Oil Company	20.56

Priority of Service.

The contracts with the Public Service Company of Colorado, the Cheyenne Light, Fuel and Power Company and the Greeley Gas and Fuel Company provide that,

'the demands of domestic consumers of the Vendor, the Vendee and/or of other 'distributing customers to which the Vendor or Vendee may sell natural gas, are to be preferred over service to industrial consumers; provided, however, that such domestic consumers' preference shall not be exercised so as to deprive the Colorado Fuel & Iron Company of the volume of natural gas needed to complete open hearth heats then in jeopardy and to keep its furnaces warm during extreme domestic demand upon the Vendor's pipe line, or so as to deprive any other industrial or commercial consumer which requires a small proportion of its normal demand to prevent damage to its appliances.' (FPC No. 2, pp. 11 and 12; FPC No. 3, pp. 11 and 12; FPC No. 4, pp. 10 and 11)

The Colorado Fuel and Iron Corporation mentioned above is a main line industrial customer of the Colorado Interstate Gas Company.

The agreements covering the sale of gas to the Highway Gas Company and the United States Government make no mention as to the relative priority standing with other sales of the Colorado-Wyoming company.

The agreements with the Adolph Coors Company, Board of Water Commissioners, Golden Fire Brick Company, Colorado Portland Cement Company, Kuner-Empson Company and the Producers Canning Company provide that:

'The Seller (Colorado-Wyoming Gas Company) does not by this contract undertake to furnish the said Buyer a full and uninterrupted supply of gas for the period named herein, but only to furnish such a quantity and for such a length of time, limited by the terms hereof, as the wells and pipelines of the Seller are reasonably capable of supplying, and subject to Seller's right to require a discontinuance of the use of its gas by the Buyer, in whole or in part, without notice, at any time it may deem it necessary by reason of accidents, breaks in line, repairs, shortage of gas, requirements of domestic customers or any reasonable cause whatever and without prejudice to its rights to continue delivery to other parties, and without subjecting the Seller to any claim for damages for such discontinuances' (A.C.C., Sec. 4; B. W. C., Sec. 4; G.F.B.C. Sec. 4; C.P.C.C., Sec. 5; K-E.C., Sec. 4; P.C.C., Sec. 4)

'In the event the demands of domestic consumers shall necessitate cutting off, stopping, or reducing the delivery of natural gas to the Customer (Denver Pressed Brick Company and the Great Western Sugar Company), the determination by the Company of such necessity shall be final and binding upon the Customer.' (D.P.B.C., Sec 5; G.W.S.C., Sec. 5)

The agreement with the Public Service Company of Colorado for the sale of boiler fuel gas to the Valmont plant provides that:

'Vendor (Colorado-Wyoming Gas Company) agrees to maintain its plant and system in such condition as to be

able, on not more than sixty minutes notice from Vendee, to begin delivery of gas for boiler fuel purposes in quantities not exceeding a rate of seven million (7,000,000) cu. ft. per day, limited by the requirements of Vendor's other customers, its existing facilities, and its ability to obtain gas from its sources of supply.' (P.S.C.C., Sec. 1)

(Vol. 86, pp. 12877-12891.)

* * * * *

When the Colorado-Wyoming Company constructed its main line from Denver to Fort Collins it provided sufficient capacity in the line to serve gas to the Valmont Power Plant of the Public Service Company of Colorado. This was done at the request of this purchaser. In order to serve this plant it was necessary to change the construction plans for the line from Arvada to Boulder Junction from 8 inches to 10 inches, and increase the line from Boulder Junction to Valmont Junction from 6 inches to 8 inches. The laterals from Valmont Junction to serve Boulder and the Valmont plant are 6 and 8 inches.

The cost of changing the lines to meet the requirements was estimated to be $78,000. This line is of sufficient size to carry 1,000,000 MCF of gas annually and the costs included the branch line from Boulder Junction to Valmont and the installation of a measuring station. It was determined that upon the base load of 1,000,000 MCF annually the business could be handled at a profit if gas was sold at not less than 2.3c per MCF above the purchase price of the gas from the Colorado Interstate Gas Company. The breakdown of the computation was:

4% depreciation on $80,000	$ 3,200
6% return on $80,000	4,800
Compressing cost on 1,000,000 MCF estimated at 1c per MCF	10,000
Taxes and other operating costs estimated at	5,000
Total	$23,000

After deliveries began to the Valmont plant, experience proved that the plant did not use 1,000,000 MCF annually and the Public Service Company of Colorado could give no assurance that it would use such an amount. Therefore, the

rate was changed, the parties agreeing to a 'Readiness to serve charge', equal to the depreciation at 4% and a return on the investment at 6%, making a total charge of $8,000 per year. With this 'Readiness to serve charge' it was estimated that gas could be delivered at 1.5 cents per MCF above the purchase price.

The rate as applied today is a 'Readiness to serve charge' of $8,000 per year to be paid in twelve equal installments. In addition, a charge of (a) for gas used for miscellaneous fuel requirements—2.5 cents per MCF above the purchase price of such gas, and, (b) for gas used for boiler fuel requirements—1.5 cents per MCF above the purchase price of such gas. This rate schedule is to remain in effect until October 31, 1949.

(Vol. 86, pp. 12898-12900.)

Q. Now, Mr. Lester, in connection with Exhibit 251, which you have described, about what period of time did you devote to that study and the preparation of that exhibit?

A. I devoted a considerable period of time to that study. I was out here in 1939 for a period of two or three months and I devoted some of that to the Colorado-Wyoming and also again I was out in September or October of 1940 and devoted some more time to the study.

Q. This exhibit carries your studies down through what year?

A. Generally through 1939, down into 1940. There is some reference to certain charges that were changed in 1939.

Q. Generally the billings and the quantities of gas set forth as sold to cover periods down through December 31, 1939?

A. That is correct.

Q. It is only in a few instances that you have covered anything beyond December 31, 1939?

A. That is practically the only instance is in reference to the billings of the company as made as regarding tariff. The date of those I have tried to keep up to date.

Q. Then it is down through December 31, 1939, on all

matters excepting where you have indicated that filings of rate schedules have been made subsequent to December 31, 1939?

A. That is correct.

Q. In all other respects the purpose of the exhibit is to bring the matters down through December 31, 1939?

A. That is correct.

Q. And in connection with the preparation of that exhibit you went through the company's books and records and got certain of your information directly from those books and records?

A. Yes, I had access to the books and records and I went to the books and records to verify information and to get information therefrom.

Mr. Langé: I believe that is all for the present.

Cross Examination.

By Mr. McCreery:

Q. Mr. Lester, what is the purpose of this exhibit?

A. It is to show the charges and rates that the company actually charges on its books.

Q. What does it show?

A. It shows what the charges have been.

Q. What conclusions did you undertake to present by this exhibit?

A. Set them forth for the information that they might contain for the Commission as to what the company has actually charged on the books and the rules and regulations surrounding the rates that it has used in setting up its billings to its respective customers and condensed them into a yearly basis.

Q. It is really your construction of what the operations have been, isn't it?

A. No, it is actually the construction.

Q. You mean that your statement here is other than your conclusion?

A. That is a statement of the things that have been billed and the quantities of gas sold as reported by the directors of the company.

Q. You arrive at certain conclusions, do you not, in this statement and this exhibit?

A. I possibly have arrived at certain conclusions.

Q. If you have, they are your own?

A. That is right.

Q. Now, will you tell me what your definition of load factor is?

A. Load factor is the variation of the average load from the maximum load over a period of time expressed generally in a percentage.

Q. Now, what period of time did you use?

A. One year's time.

Q. Now, in connection with the industrials you used the full period of a year irrespective of the portion of the year in which the industrials were actually utilizing gas, did you not?

A. Yes. The load factor of mine was for a year. Now, I didn't define my load factor as only using that period of a year deducting from the total year only that period of the year for which it had been used. If I had of, I would have got a load factor for perhaps 200 days or 300 days.

Now, we have load factors for months, weeks, days, years, five years, ten years—any period. The stated period of time of mine is a year.

Q. I just asked you what period you used.

A. I just wanted to protect from the question that you may lead to that you are talking of a load factor or perhaps of an output factor. You are perhaps talking of an output factor. I just wanted to keep that straight.

Q. Now, the answer is that you gave no consideration to actual days upon which industrials took gas but treated them as though they took it 365 *years* a year?

A. I followed the definition of the load factor of a year.

Q. That's what you did?

A. I used it for a year, yes.

Q. On that basis?

A. Yes. I wasn't building up an output factor. That's what I'm trying to keep you straight on, your load factor and output factor.

Q. Now, you state on Page 8-A of your statement that "No records have been kept of occasions when domestic peaks were of sufficient magnitude so that industrial cases were necessarily reduced during the peak load periods." What do you mean by that statement?

A. Why, the company had kept no records, only of the information that they had furnished me and which is a table in the exhibit and that is all that they said they had records and data upon.

Q. Aren't you mistaken on that, Mr. Lester? All of the meter charts would show exactly what curtailments had been made to satisfy domestic requirements. While they don't have any book records of it, their metered charts would show that, would they not?

A. I believe this was taken directly from the information furnished to me from the company and a direct quotation from them.

Q. I asked you if that information isn't available from metered charts.

A. It may not be. The company informed me that it was not, said no data was kept of it.

Q. No data given?

A. I am sure that statement was taken directly from the company.

Q. These various communications that were made to the Federal Power Commission on that very subject—here is a letter of December 11, 1939, addressed to Mr. O'Connor, Federal Power Commission, in answer to a letter by him to the company of date October 20th, in which the writer, the Vice President and General Manager, says:

"I also have in mind several occasions when the domestic peaks were so heavy that industrial plants were asked to reduce their takes during the period of the peak (from one to three hours) after which they were permitted to resume full load operations."

Now, then, the next sentence is: "No record of such instances has been kept and we are unable to furnish dates and amount of reduction on those occasions."

Did you ask at that time or any other time to see the meter charts?

A. No, I assumed that one request for information would have the same effect as two. I didn't see that two requests would have any more benefit than one, and my quotation I used in there reflects directly—refers directly to that latter sentence that you read from the letter.

Mr. Lange: What is the date of that letter, Mr. McCreery?

Mr. McCreery: That is December 11, 1939, Mr. Lange.

Mr. Lange: Do you have that correspondence with you, Mr. Lester?

Mr. McCreery: His quotation refers to the same letter that talks about industrials to take care of domestic peak demands.

The Witness: I have that.

Mr. Lange: In order to make the record complete, Mr. McCreery, you might read that whole letter into the record.

Mr. McCreery: It will be quite all right, but I am not interested in it at this particular time. I have got some more. I have no objection to it, but I am interested in this witness' statement on Pages 8 and 8-A:

"There have been no interruptions in the Colorado-Wyoming Gas Company's domestic and industrial service at the same time, although domestic service on branch lines has at times been interrupted due to line failure. Industrial service has at times been totally interrupted or reduced so that domestic service could be maintained when washouts or other accidents have affected the pipe line of the Colorado Interstate Gas Company."

Now the facts are, are they not, Mr. Lester, that there has been curtailment and shutoff of industrials to satisfy domestic peak demands when there has been no accidents or washouts of any kind, just simply because there wasn't enough gas in the line to satisfy both demands?

The Witness: The company did not so furnish me that information and they say it was not of record nor did they know the exact time or period when it did occur.

By Mr. McCreery:

Q. In the very letter you are relying on they do state just what I read, do they not, where it says: "I have also in mind several occasions when the domestic peaks were so heavy that industrial plants were asked to reduce their takes during the period of the peak (from one to three

hours) after which they were permitted to resume full load operations."

A. He said he had that generally in his mind but he couldn't put his finger on any point. Sometimes the memory isn't quite so good and you have to get down to the actual date in order to nail it.

Q. That is what we are undertaking to do right now, Mr. Lester.

A. So I based mine on the information furnished me by the company.

Q. Well, do you know as a matter of fact whether or not there were such curtailments and cutoffs to satisfy peak demands of domestic consumers?

A. They didn't furnish it to me at that time.

Q. I asked you if it is a fact.

A. At the time that letter is written?

Q. Yes.

A. No, not to my knowledge, and no information was furnished me by the company, although it was definitely requested that it be furnished. I was relying on the company's information.

Q. The answer is in this letter that there were those shutoffs.

A. He couldn't place it. I don't know whether it is or whether it is not. He says, "Oh, yes, I can recall to mind," but he hadn't recalled it to mind when it was.

Q. Are you familiar with similar correspondence between the company and the regional director in the year 1940?

A. I think I have seen that correspondence. Now, definitely I don't know whether I am thinking of the same correspondence that you are talking about there because I haven't the correspondence you are referring to before me.

Q. I will identify it very shortly. Your exhibit is dated October 1940?

A. Yes.

Q. Did you ever read a letter of date February 25, 1941, for instance, in answer to a letter of date February 24th, 1941, in relation to shutoffs to supply domestic peaks during certain portions of the year 1940?

A. When did the date of the shutoffs begin?

Q. These were late in 1940, subsequent to the date of your exhibit.

A. Yes, I have seen that.

Q. And that letter you recall indicated that on November 12 and 13, 1940, the Cement plant, to protect the Cheyenne load during severe cold, was curtailed and the plant ordered out on November 12th at 9:00 p. m., and service resumed at 8:00 a. m., November 13th and on December 12th to 14th, 1940, the Cement plant was curtailed during the period of December 12th, 13th and 14th; from the 12th from 5:00 p. m. to 10:30 p. m., curtailed 800 Mcf.; on December 13th from 10:00 a. m. to 6:00 p. m., curtailed 1500 Mcf., and that on December 14th, rather than suffer further curtailments, they shut down completely at 6:40 a. m. of that day? Did you see that letter?

A. Yes.

Q. You didn't desire to embody it?

A. I was restricting it to the period of that time in my exhibit. If you want to bring that up to date and include that information, it's all right with me. Had I had it I would have included it.

Q. Now, did you also see a letter of May 29th, 1940 in answer to a letter of May 9th, 1940 in which the company stated:

"In our letter of December 11, 1939 addressed to Mr. J. V. O'Connor, we called attention in the last paragraph to the possibility that all industrial loads might have to be shut off during a peak winter day. On January 18th and 19th, 1940, that very thing took place. All industrial loads were ordered off at 9:30 a. m. on January 18th and distribution companies asked to take all steps possible to conserve the gas supply. Public Service Company reported the curtailment of industrial loads near Denver, and Cheyenne Light, Fuel & Power Company reported curtailments at Cheyenne.

"Curtailments to our industrial customers lasted for about thirty hours and were estimated at 1270 Mcf.

"Public Service Company reported curtailments of 717 Mcf., and Cheyenne Light, Fuel & Power Company reported curtailments totaling 152 Mcf. at Cheyenne. Low pressure experienced on the Cheyenne distribution system was reported to have resulted in several low pressure complaints."

Did you see that letter at or about the time it was received by the Commission which was some months prior to your

exhibit, the date of your exhibit and apparently a considerable time before you completed your statement?

A. No, I didn't see it before that time, no.

Q. When did you put these typewritten sheets into your written statement?

A. I put them in sometime in October 1940.

Q. 1940?

A. Yes.

Q. Well, this particular Page 8 I talked about is one of these typewritten sheets, so that in October it was available at the offset of the Commission, the very thing that you say didn't exist so far as your Page 8 and Page 8-A is concerned.

A. I would like to have that letter before me.

Mr. Lange: That refers to 1940.

Mr. McCreery: That's right.

The Witness: I said I was speaking of the statistical part in there of your interruptions at the end of 1939. My statistical part of it doesn't carry anything beyond 1939 and wouldn't have any reference to 1940 because the statistical part wasn't in there.

By Mr. McCreery:

Q. Even though you prepared these sheets in 1940, you weren't dealing with the 1940 conditions or any other conditions than you state you had used originally, is that correct?

A. That is correct.

Q. So in the light of subsequent events which aren't present in your study, your statement at Pages 8 and 8-A would have to be considerably revised, would it not?

A. Well, now, it says here the Public Service Company reported the curtailment and the Cheyenne Light, Fuel & Power Company reported a curtailment of gas, but I just don't see about the Colorado-Wyoming curtailment here.

Q. This is a letter written by the Colorado-Wyoming Gas Company, is it not?

A. Yes.

Q. And is not the Public Service Company and the Cheyenne Light, Fuel & Gas Company, two companies, that were the local distribution companies of Colorado-Wyoming Gas?

A. Yes, it states here that there is possibility of industrial loads having to be shut off.

Q. Then read the next.

A. On January 18 the very thing took place. All industrial loads were ordered off on January 18.

Mr. Lange: What year?

The Witness: January 18, 1940.

By Mr. McCreery:

Q. So that in the light of those conditions your statement on Page 8 and 8-A would have to be altered considerably?

A. Not for 1939. That speaks for 1939 and prior to that.

Q. You undertake to state there were no curtailments or shutoffs of industrial service in 1939 to supply peak load demands?

A. There was no record of it taken and the company has so stated it.

Q. Although they didn't state it was done in 1940?

A. In 1940?

Q. No, in 1939.

A. Oh, no. It says the very thing took place on January 18, 1940, not 1939.

Q. Then look at this letter of December 11, 1939. Read that one to see whether it has happened.

A. It says: "Replying to your request of October 19, we present the attached table which shows the major irregularities in our operation. This includes those instances where the cause originated on the Colorado Interstate Gas Company's system.

"I also have in mind several occasions when the domestic peaks were so heavy that industrial plants were asked to reduce their takes during the period of the peak (from one to three hours) after which they were permitted to resume full load operations. No record of such instances has been kept and we are unable to furnish dates and amount of reduction on those occasions.

"We believe we have a very good record for industrial service, having had to shut off our industrial load for a total of only seven days since starting operations. Half of that time occurred between 5/31 and 6/4/37, when the In-

terstate's line was washed out in several places by the flood in Little Perico Creek in Texas."

Mr. Lange: Read the last paragraph and we will have the whole thing.

The Witness: "In the past the Colorado Interstate Gas Company has been able to furnish us sufficient pressure to maintain excellent winter service to our industrial plants but as to the loads on their lines have been built up, it has been increasingly difficult to maintain high pressure at Arapahoe. We find that winter storms now tax our system beyond its capacity and at such times industrial load must be reduced. We are told that we can expect no more than 125."

Mr. Lange: It is addressed to Mr. J. V. O'Connor, Federal Power Commission, Central Savings Bank Building, Denver, Colorado?

The Witness: Yes, sir.

Mr. Lange: It is signed by C. J. Shortess, Vice President and General Manager?

The Witness: Yes, sir.

Mr. Lange: And in order that the record may be complete, Mr. McCreery—

Mr. McCreery: Just a minute. I don't want this interruption. You can put that in later. I want to keep on this point here.

Q. When did you first see that letter?

A. I saw that letter at the time it was received.

Q. After you had seen that letter you wrote this Page 8 and 8-A?

A. Yes, sir, I stated there was no record. The company says: "No record of such instances has been kept," and I so state that no record has been kept.

Q. And you said also that there were no interruptions?

A. Yes.

Q. This letter says the opposite.

A. And I think I qualified the "no record of the interruption."

Q. So that is your conclusion?

A. Sure. It says "There was no recorded interruptions."

Q. I note you state on Page 6 that the Colorado Portland Cement Company—this is from your statement—"The Colorado Portland Cement Company is the main line industrial customer of the Colorado-Wyoming Gas Company farthest from the source of supply."

Was it your idea by that statement to imply that as compared with other industrials they paid too low a price?

A. I merely stated the bald fact that was true and they did—

Q. Isn't this also a very bald fact, that the consumption at the Colorado Portland Cement Company was about twice as great as the combined consumption of all of the industrial users put together?

A. It was considerably greater and that is shown in the report.

Q. That is a bald fact?

A. It is shown in the record and I am merely showing it as per Mcf., as I state. I couldn't state it was per Mcf. and then state it was per million feet of gas. I had to state Mcf.

Q. It was significant to state they were further and paid the lowest price but it wasn't significant to indicate the relative volumes?

A. That was shown in the exhibit itself.

Q. But it didn't justify any comment on your part as you have made here?

A. No, I didn't think about it.

Q. You didn't think about it?

A. No.

Q. What do you mean on Page 8 when you state: "The contractual priority of service rights of customers, of course, are dormant so long as there is available an adequate supply to meet the full requirements of all customers and adequate capacity in lines and equipment?

A. I meant just what I said, that the company doesn't exercise any priority, any contractual priority as long as adequate service is available to everybody. It is dormant during that period of time.

Q. By that you mean the right is still there to be exercised but it isn't necessary, of course, when they have an adequate supply to exercise it, and they wouldn't exercise it?

A. I wasn't speaking of the right but whether the actual exercise was taken at that time.

Q. I thought perhaps that was what you meant. Now turn to Page 6 of your statement, turning to the top of your page in your second column. What do you mean by "Last block of domestic rate and space heating rate cents Mcf."? What do you mean by that?

A. Well, you have the first block of the rate through there at one price and the last block is at another price. I placed them on a uniform pressure base rather than on a sales base.

Q. What do you mean by that last block?

A. Your break is in two blocks.

Q. I appreciate that.

A. And this refers to the second part of your rate. You have a two-part rate.

Q. Do they include all gas upon which the four cents is applicable, that is, the space heating gas, or do you know?

A. Yes, it is.

Q. It does?

A. It takes in that break afterwards.

Q. Is the average revenue based upon actual revenue received from purchasing company divided by the Mcf. converted to the 14.65 pound pressure base?

A. Could I have a copy of my exhibit?

Mr. Lange: Here is a copy of it.

By Mr. McCreery:

Q. I am referring to Page 8; Mr. Lester.

A. The information came from—yes, that refers to the average of the domestic and space heating.

Q. My question was: "Is this the average revenue as you headed it based upon average revenue you received from purchasing companies divided by the Mcf. converted to the 14.65 base"?

A. Yes.

Q. Your answer is yes?

A. Yes.

Q. I notice a quotation on Page 4 of your statement, being at about the middle of the page. It states: "To the full extent it may be able to do so." What is your source of that quotation?

Mr. Lange: On what page is that, Mr. McCreery?

Mr. McCreery: Page 4 of his statement, Mr. Lange.

The Witness: It comes from the contract.

By Mr. McCreery:

Q. Which contract?
A. I will have to look it up.
Q. Well, I guess that is not important.
A. I haven't all of my working sheets here.

Mr. McCreery: It isn't of sufficient importance so I will withdraw the question, Mr. Examiner.

The Trial Examiner: Very well.

Mr. Lange: He can furnish it at some time during the day when he has time to look it up.

Mr. McCreery: Just have it put into the record, Mr. Lange.

Mr. Lange: Very well.

By Mr. McCreery:

Q. What did you determine the load factor of this company to be for the year 1939?
A. I didn't so state what the load factor of the company was.
Q. It doesn't appear in this study?
A. It doesn't appear in this study, no.
Q. The load factor of the entire company was not material in your study?
A. It is not here in this study.
Q. In arriving at the load factor on these industrials you have gone on a yearly basis, 365 days a year?
A. I don't think there was any reference where it was on a yearly basis.
Q. In the case of customers whose meters were read weekly you simply averaged the weekly meter readings?
A. Yes, sir, I did.
Q. Did you ask to see the charts which would have shown that?
A. No, we requested that information. Having requested the information, the company furnished it to us and

we asked for it to be on the same period. I don't see any reason why two requests are better than one.

Q. This doesn't have anything to do with what we were talking about a while ago?

A. That is true.

Q. You said the books and the records of the company were made accessible to you, did you?

A. Yes, certainly. The billing of the company was made accessible.

Q. I asked you if you examined their meter charts.

A. No, I didn't.

Q. All right, you have examined meter charts, haven't you?

A. Yes, sir.

Q. So that you would know they have them?

A. Yes, they have them.

Q. You know what those charts would show, don't you?

A. Yes.

Q. And you know you could have gotten the actual peak demands from those charts as indicated by the lines on the charts, do you not?

A. In certain meters that is correct.

Q. You certainly weren't expecting the company to go back and study all of those charts through for you? If you had wanted to know what those charts contained you could have gone there yourself, couldn't you?

A. No, when I was requesting certain information they probably had the information and had it already drawn out along those lines and kept track of the load factor, what their load factor was.

Q. You didn't get these load factors from the company?

A. I certainly got it from the information furnished by the company.

Q. At least these are the load factors you built in your exhibit?

A. Those factors are only a ratio of dividing figures and the underlying facts upon which the ratio was based were furnished by the company.

Q. But the figures you finally concluded were the load factors of your own compilation?

A. I made the division.

Q. On whatever formula you followed?
A. Yes.

Mr. McCreery: I think that is all.

Redirect Examination.

By Mr. Lange:

Q. Referring to the letter received by the Federal Power Commission from the Colorado-Wyoming Gas Company, dated December 11, 1939, I will ask you to read the letter that was the basis of the letter received on December 11, 1939.

A. "Colorado Springs, Colorado, October 30, 1939. Mr. C. J. Shortess, Vice President and General Manager, Colorado-Wyoming Gas Company, 407 Continental Oil Building, Denver, Colorado.

"Dear Mr. Shortess: Will you please supply a statement of total interruptions of service at each delivery point, giving in each instance:

"1. Customer

"2. Point of Delivery

"3. Date

"4. Duration

"5. Cause

"Please supply also a statement of instances, other than the above, in which it has been necessary to reduce or suspend service to industrial customers, giving in each instance:

"1. Customer

"2. Whether reduction or suspension of service

"3. Date

"4. Duration

"5. Cause

"Receipt of this information at an early date will be appreciated.

"Very truly yours,

"J. V. O'Connor (Signed)."

Q. And in connection with the Colorado-Wyoming Gas Company's letter of December 11, 1939, particularly the statement where they say "We present the attached table," that attached table, Mr. Lester, is that the same as Table No. R-5 appearing in Exhibit No. 251, your exhibit?

A. Yes, it is.

Mr. Lange: I believe that is all, Mr. Examiner.

Mr. McCreery: That is all.

The Trial Examiner: You may step down, Mr. Lester.

(Vol. 86, pp. 12903-12926.)

Commission Exhibits 307 and 308 (Appendix this Record).

The Commission witness, WILLIAM H. LYON, in his cross-examination (Vol. 81, pp. 12,049-14,149) in connection with Exhibits 227 and 228, entitled, respectively, "Colorado-Wyoming Gas Company, Allocation of Cost of Service, Year 1929" and "Summary of Cost of Service, years 1937, 1938 and 1939," relating to all three respondent pipeline companies, testified:

"Q. Now, Mr. Lyon, do you know whether or not all of the industrial contracts entered into by Colorado-Wyoming Gas Company carry a shut-off provision so that if sufficient gas is not available to supply the demand made upon the company the industrial contracts are shut off in whole or in part so as to accord a supply to those having prior rights, the domestic consumers?

"A. I believe that clause as you state it is substantially in all of the contracts. I have not examined the contracts for the sale or distribution—

"Q. Do you know whether or not a similar provision is contained in the franchises under which gas sold by Colorado-Wyoming Gas Company is served various communities by Public Service Company of Colorado? Do you know that?

"A. I haven't examined the franchises.

"Q. So you do not know that?

"A. No.

* * * * *

"*The Witness:* As I understand the question, I will ask you this: Do you mean that the rights for gas service for the Colorado-Wyoming Gas Company on the facilities of the Colorado Interstate Gas Company are subordinate to the rights of the city of Denver?

Mr. McCreery: Yes.

* * * * *

"A. I know that the subordination of one contract or class of service is related to another and that the Colorado-Wyoming Gas Company's contract has some peculiarities, but I am not able to recall right now exactly the wording of that.

"Q. Do you understand or know whether or not the supply of gas to Colorado-Wyoming Gas Company is also subordinate to the supply of gas for the city of Pueblo?

"A. I believe I recall that provision, yes.

"Q. Did the fact that shut-off provision was in all of the industrial contracts, in the terms of these franchises, if any of the franchises have terms, and of these various contracts enter into your study or Exhibit No. 227?

"A. No, except in the statement that I made with reference to the shut-off clause.

"Q. There is no effect given to them in the determination of this exhibit?

"A. No.

"Q. Nor in any of the elements in your exhibit, is that true? It doesn't enter into your exhibit at all?

"A. The determinations in that exhibit, that is correct."

(Vol. 81, pp. 12,059-12,061.)

And again:

"Q. Mr. Lyon, did you give consideration or effect in your study to the fact that at the present time the entire capacity of the Colorado-Wyoming system is required to satisfy peak-day demands of domestic consumers?

"A. No effect."

(Vol. 81, p. 12,146.)

This witness had knowledge of numerous and repeated "shut-offs" and curtailments of deliveries to industrial cus-

tomers to meet peak-load requirements of domestic consumers (Vol. 81, pp. 12,061-12,069).

Similarly, the Commission witness, Claude R. Lester, in his Exhibit 251, entitled "Report on the Review and Analysis of the Contracts, Rates and Billings of Colorado-Wyoming Gas Company," refers to "Priority of Service" of domestic consumers over industrial customers contained in the Company's various sales contracts (Ex. 251, Statement, pp. 7-8; Vol. 86, pp. 12,889-12,892). He makes no reference, however, to the provisions and requirements for such priority and preference embodied in the gas purchase contract of Colorado-Wyoming Company with Colorado Interstate Company (Ex. 101, pp. 13-14).

The witness then concluded (Ex. 251, Statement, pp. 8-8 (a); Vol. 86, pp. 12,891, 12,892):

"The contractual priority of service rights of customers of course, are dormant so long as there is available an adequate supply of gas to meet the full requirements of all customers and adequate capacity in lines and equipment." • • •

"There have been no interruptions in the Colorado-Wyoming Company's domestic and industrial service at the same time, although domestic service on branch lines has at times been interrupted due to line failure. Industrial service has at times been totally interrupted or reduced so that domestic service could be maintained when washouts or other accidents have affected the pipeline of the Colorado Interstate Gas Company. No records have been kept of occasions when domestic peaks were of sufficient magnitude so that industrial takes were necessarily reduced during the peak load periods."

On cross-examination, the witness stated that he had knowledge, based on Company letters to the Commission in 1939, 1940 and 1941, of numerous instances of shut-off or curtailment of industrial service to satisfy domestic peak demands, because there was not enough gas available to supply both demands (Vol. 86, pp. 12,907-12,918.)

Counsel for Colorado-Wyoming Company objected and moved to strike the above quoted conclusion of the witness,

that "there have been no interruptions in the Colorado-Wyoming Gas Company's domestic and industrial service at the same time," etc. (Vol. 86, p. 12,892). In sustaining this motion the Examiner ruled:

"*The Trial Examiner:* There is so much testimony in regard to the shutoffs that as far as the Examiner is concerned, the Examiner would prefer to rely upon the record rather than the statement of Mr. Lester's; therefore, the examiner is going to entertain the motion of Mr. McCreery to strike that paragraph beginning at the bottom of page 8 of this written statement and concluding on page 8-A."

(7) *Peak-Day Purchases and Deliveries.*

The peak-day purchases and deliveries in M.c.f., of natural gas made by Colorado-Wyoming Gas Company in the years 1938, 1939 and 1940 at 12.9 lbs. and 14.65 lbs. per square inch absolute, respectively, were:

	Gas Purchased	At 12.9 lbs. Pressure	At 14.65 lbs. Pressure
12/26/38	Colorado Interstate Gas Co.	15,315	13,486
	Berthoud Field	170	150
		15,485	13,636
	Gas Delivered	15,485	13,637
	Gas Purchased		
2/9/39	Colorado Interstate Gas Co.	12,871	11,334
	Berthoud Field	196	173
		13,067	11,507
	Gas Delivered	13,122	11,556
	Note: Total Industrial	593	522
	Great Western Sugar Co. supply cut off 2:15 P. M. for balance of day.		

1/18/40	*Gas Purchased*		
	Colorado Interstate Gas Co....	11,646	10,255
	Berthoud	228	201
		11,874	10,456
	Gas Delivered	12,803	11,274
	Gas Purchased		
12/13/40	Colorado Interstate Gas Co.....	16,053	14,135
	Berthoud Field	151	133
		16,204	14,268
	Gas Delivered	15,929	14,026
	Note: Sales for Resale—Customers	11,468	10,098

(Ex. 242, Vol. 83, pp. 12,429, 12,431.)

The load factor of the Colorado-Wyoming system for the year 1939 was 58.5 per cent and for the year 1940 was 53.8 per cent (Vol. 84, p. 12,610. The load factor at Cheyenne, Wyoming, for 1939 was 44.67 per cent (Vol. 29, p. 3971).

Commission witness Lyon testified with respect to system deliveries of Colorado-Wyoming Gas Company, as follows:

	At 12.9 lbs. pressure	At 14.65 lbs. pressure
12/26/38	15,244 mcf.	13,075 mcf.
1/16/39		12,070 mcf.
2/ 9/39	12,672 mcf.	10,786 mcf.
5/17/39		12,512 mcf.

(Vol. 81, pp. 12,057-12,058, 12,098, 12,106-7, 12,144. Ex. 227, Table 2, Col. 9.)

Commission Exhibit No. 249 (Appendix this Record).

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(8) *Inter-corporate Relations.*

Exhibit No. 10 (Federal Trade Commission Report, Vol. 83, Senate Document 92, of date December 15, 1935 (Appendix this Record).

Commission Exhibits relating to corporate history, corporate "background" and intercorporate interests and relations.

Deposition of Christy Payne, October 22, 1940 (Appendix this Record).

Exhibit No. 1. Agreement of April 5, 1927 (Appendix this Record).

Transcript of Testimony, Vol. I (Spencer). Beginning with the 5th line from top of page 58, to and including the 6th line from top of page 63 (Appendix this Record).

Commission Exhibit No. 54. Excerpts from Federal Trade Commission Report No. 66, Senate Document 92, Part 66 (Appendix this Record).

Excerpts from Transcript of Testimony, Vols. 33 and 86 (Appendix this Record).

Commission Exhibit No. 138. Map (Appendix this Record).

Commission Exhibit No. 138A (Appendix this Record).

Commission Exhibit No. 141 (Appendix this Record).

Commission Exhibit No. 142 (Appendix this Record).

Commission Exhibit No. 143 (Appendix this Record).

Commission Exhibit No. 250 (Appendix this Record).

CONTRACTS AND AGREEMENTS FOR PURCHASE OF GAS.

Colorado Interstate Gas Company (Ex. 7f, 101).

Original, Amendments and Industrial Rate Supplements.

Dated: Original, October 3, 1929.
Supplement, October 8, 1929.
Miscellaneous Industrial Rate Supplements of various dates.

Company Exhibit 101 (Appendix this Record).

The Supplemental Rate Schedules:

These relate to various industrial and direct sales. Under date of February 18, 1941, of the price of 12¢ per M. c. f. charged Colorado Portland Cement Co., near Laporte, Colorado, by Colorado-Wyoming Company for gas, 9½¢ is to be paid Colorado Interstate Company as the purchase price during the year 1941, with the 'understanding that Colorado Interstate Gas Company does not undertake to furnish a full and uninterrupted supply of gas, but may at any time and without notice discontinue in whole or in part the furnishing of gas for the purpose of said contract" (Ex. 297); under date of May 10, 1939, Colorado Interstate Company is to furnish to Colorado-Wyoming Company surplus natural gas for resale "to Public Service Company of Colorado for industrial use in its Valmont electric power plant located near Boulder, Colorado," at 9½¢ per M. c. f. to Colorado Interstate Company "for a period of thirty (30) days and continuing thereafter subject to cancellation upon thirty (30) days' notice by either party"; under date of June 30, 1938, the price to be paid Colorado Interstate Company for gas sold to Colorado-Wyoming Company, and by it resold to Public Service Company of Colorado for distribution in the communities of Edgewater and Mount Air, was fixed at 35¢ per M. c. f. (Ex. 7f), and under date of July 28, 1933, the price to be paid Colorado Interstate Company for gas served by Public Service Company to the Jewish Consumptives' Relief Society was agreed to be 75% of the gross revenue as billed to that hospital (Ex. 7f). The remaining 25% is divided equally between Colorado-Wyoming Company and Public Service Company (Ex. 102 A).

The gas purchased under this contract amounts to more than 98% of the gas supply of Colorado-Wyoming Company (Ex. 51).

Goodstein Pipeline Company (Ex. 113).

Dated: November 25, 1939.

Natural Gas Supply:

Berthoud Structure, so-called, near Berthoud, Colorado.

Term: During the life of the Berthoud Structure.

Price: 10c per M. c. f. at contract pressure base of 14.65 pounds.

Delivery: At a point near Berthoud, Colorado, on the main line of Colorado-Wyoming Company's system.

Payment for gas: Not later than 15th of the month following the calendar month in which gas is sold and delivered.

General: The contract also contains usual provisions governing purity and heat standards, covering delivery and metering, and relating to general administration procedure.

The gas purchased under this contract amounts to less than 2% of the gas supply of Colorado-Wyoming Company (Ex. 51).

CONTRACTS FOR SALE OF GAS TO DISTRIBUTION COMPANIES FOR RESALE (EX. 102).

There are four such contracts:

Cheyenne Light, Fuel & Power Company.

Original contract, September 25, 1931.
Amendatory contract, August 24, 1934.
Amendatory letter, August 1, 1938.

Public Service Company of Colorado.

Original contract, October 3, 1929.
Amendatory contract, August 24, 1934.
Amendatory contract, September 24, 1937.

Greeley Gas & Fuel Company.

Original contract, July 29, 1930.
Amendatory contract, October 24, 1934.

Highway Gas Company.

Contract, June 20, 1933.

Sale and Purchase of Gas:

Under each of the foregoing contracts, Colorado-Wyoming Company agrees to sell and deliver all the natural gas

requisite for the supply of the domestic consumers in the territory then or thereafter connected to or served with gas from the distribution lines of the companies in question.

All of the contracts, except the Highway Gas Company contract, also provide for the sale and deliveries of "such amounts of natural gas as may be requisite to fulfill contracts made with the consent and approval of the Vendor by the Vendee for the sale of natural gas to consumers other than domestic consumers."

In addition, the contract with the Cheyenne Company and Public Service Company provides for the sale and delivery of "such amounts of natural gas as the Vendee may desire for use in its power plant or plants" under terms and conditions to be agreed upon.

Every contract is subject to the further provision "that the Vendor shall not be obligated to sell and deliver natural gas in excess of the amount it has currently available for delivery."

Delivery:

Delivery is to be made to each company at the "city gate" of each of the cities and towns served by the several companies, except that delivery to Highway Gas Company is to be made at a point on the main line of the Colorado-Wyoming system near the City of Loveland, Colorado.

Source of Supply:

The Amarillo Field, in the Panhandle of Texas, is the source of supply for each of the contracts in question except the Highway Gas Company, which is served by an exchange from the Berthoud Structure, so-called, near Berthoud, Colorado.

Measurement at Delivery Point:

The gas is to be measured at the delivery point, in the case of each of said contracts, at a temperature assumed to be 60 deg. F., at a base pressure of 8 ounces gauge pressure above the average absolute atmospheric pressure at point of delivery.

Payments:

Gas purchased is to be paid for on the 10th of the month

following the calendar month in which delivery is made, except in the case of Highway Gas Company, under which contract the date of payment is the 15th of the month following the calendar month of delivery.

Priorities:

All of the foregoing contracts, except the Highway Gas Company contract, contain provisions for priority in the usual form:

> "It is agreed that in case of shortage, either temporary or permanent, of natural gas and necessity for curtailment of service to any classes of consumers, the demands of domestic consumers of the Vendor, the Vendee and/or of other distributing customers to which the Vendor or Vendee may sell natural gas, are to be preferred over service to industrial consumers; provided, however, that such domestic consumers' preference shall not be exercised so as to deprive the Colorado Fuel & Iron Company of the volume of natural gas needed to complete open-hearth heats then in jeopardy and to keep its furnaces warm during extreme domestic demand upon the Vendor's pipe line, or so as to deprive any other industrial or commercial consumer which requires a small proportion of its normal demand to prevent damage to its appliances."

And in addition, each of such contracts is "subject to the terms, conditions and restrictions" under which Colorado-Wyoming Company obtains its supply from Colorado Interstate Company, that is, specifically subject to the prior rights of Public Service Company at the Denver city gate and The Pueblo Gas & Fuel Company at the Pueblo city gate. In view of the fact that the supply of gas served to Highway Gas Company is derived from the Berthoud Structure, so-called, the usual priority provisions contained in the other contracts are not embodied in this contract.

Duration of Contracts:

The Cheyenne Company contract expires September 28, 1950; Public Service Company contract expires December 31, 1951; Greeley Gas & Fuel Company contract expires April 1, 1949; and Highway Gas Company contract expires December 31, 1951.

General Provisions:

Each of the contracts contains provisions governing purity and heat standards, covering delivery and metering, and with respect to interruption resulting from *Force Majeure*, as therein defined.

The "city gate" price for gas for ordinary domestic and commercial consumption, 40c per M.; for gas sold for domestic and commercial space heating 36c per M.; for gas resold under commercial and industrial contracts, 85% of the price charged by the distribution company is payable to Colorado-Wyoming Gas Company.

CONTRACTS FOR DIRECT SALE OF NATURAL GAS. (EX. 103, 103 A).

Existing direct sale contracts for industrial use are the following:

Customer	Date	Termination
Golden Fire Brick Company	No Written Contract	Year to Year
Adolph Coors Company	Sept. 11, 1939	3 years
Kuner-Empson Company	Oct. 26, 1940	1 year
Denver Pressed Brick Company	Jan. 10, 1940	Year ending 1940
Great Western Sugar Company	Oct. 26, 1940	1 year
Producers Canning Company	Nov. 26, 1938	3 years
Fort Collins Producing Corporation	Nov. 1, 1940	1 year
Colorado Portland Cement Company	Feb. 15, 1941	Dec. 1, 1941 (Ex. 297)
Valmont Generating Plant (Standby Service)	Jan. 1, 1936	Oct. 3, 1949
Valmont Generating Plant (Commodity Contract)	Dec. 31, 1935	Oct. 3, 1949

Character of Service:

Golden Fire Brick Company.

Fuel requirements of Buyer's kilns at Golden, Colorado, plant.

Consumption 1939, 66,291 M. c. f. (Ex. 105).

Adolph Coors Company.

Fuel requirements at Buyer's malt dryers, pitch burner, and other incidental uses at Coors Brewery, Golden, Colorado.

Consumption 1939, 18,677 M. c. f. (Ex. 105).

Kuner-Empson Company.

Fuel requirements of Buyer's steam boilers and other industrial uses at canning plant, Brighton, Colorado.

Consumption 1939, 38,570 M. c. f. (Ex. 105).

Denver Pressed Brick Company.

Natural gas required to supply brick kilns and incidental uses at Buyer's brick-making plant near Loveland, Colorado.

Consumption 1939, 52,597 M. c. f. (Ex. 105).

Great Western Sugar Company.

Fuel requirements of sugar mill of Buyer at Johnstown, Colorado.

Consumption 1939, 356,606 M. c. f. (Ex. 105).

Producers Canning Company.

Fuel requirements of canning plant of Buyer near Fort Collins, Colorado.

Consumption 1939, 333 M. c. f. (Ex. 105).

Fort Collins Producing Corporation.

General oil field uses of Buyer in Wellington Oil Field, Larimer County, Colorado.

Consumption 1939, 4575 M. c. f. (Ex. 105).

Colorado Portland Cement Company.

Gas for purposes incidental to the manufacture of cement, including kilns and dryers, to the exclusion of all other fuels.

Consumption 1939, 1,015,502 M. c. f. (Ex. 105).

Valmont Generating Plant.

Standby service for Valmont Electric Generating Plant of Buyer.

Valmont Generating Plant.

Fuel requirements of boilers and miscellaneous equipment in Valmont electric generating plant of Buyer.

Consumption 1939, 31,056 M. c. f. (Ex. 105).

Priority:

All such contracts are subject to priority rights of domestic customers, it being also expressly provided that "the Seller does not by this contract undertake to furnish the said Buyer a full and uninterrupted supply of gas for the period named" in the contract, and may discontinue or reduce deliveries for "any reasonable cause whatever."

Delivery:

Colorado-Wyoming Company makes delivery at or near the plants of such industrial customers.

Measurement:

The gas sold is calculated on a pressure base of either four or eight ounces per square inch above atmospheric pressure at an assumed temperature of 60 degrees F., as specified.

Price:

Golden Fire Brick Company.

Rate:	First 10 M. c. f. or less per mos.	$10.00
	Next 90 M. c. f. per M. c. f.	.40
	Next 400 M. c. f. per M. c. f.	.20
	Next 500 M. c. f. per M. c. f.	.18
	All over 1000 M. c. f. per M. c. f.	.15
Term:	No contract in force.	

Adolph Coors Company.

Rate:	First 10 M. c. f. or less per mos.	$10.00
	Next 90 M. c. f. per M. c. f.	.40
	Next 400 M. c. f. per M. c. f.	.20
	Next 500 M. c. f. per M. c. f.	.18
	All over 1000 M. c. f. per M. c. f.	.15

Kunzr-Empson Company.

Rate: (Nov. to June, Incl.)

First 10 M. c. f. or less per mos.	$ 8.30
Next 90 M. c. f. per M. c. f.	.50
Next 900 M. c. f. per M. c. f.	.25
Next 1000 M. c. f. per M. c. f.	.22
Next 3000 M. c. f. per M. c. f.	.20
All over 5000 M. c. f. per M. c. f.	.19

(July to October, Incl.)

First 10 M. c. f. or less per mos.	$ 8.30
Next 90 M. c. f. per M. c. f.	.42
Next 400 M. c. f. per M. c. f.	.20
All over 500 M. c. f. per M. c. f.	.18

Denver Pressed Brick Company.

Rate:

First 1000 M. c. f. or less per mos.	$200.00
All over 1000 M. c. f. per M. c. f.	.18

Great Western Sugar Company.

Rate:

First 1000 M. c. f. or less per mos.	$240.00
Next 4000 M. c. f. per mos.	.24 per M. c. f.
Next 5000 M. c. f. per mos.	.20 per M. c. f.
All over 10000 M. c. f. per mos.	.18 per M. c. f.

Producers Canning Company.

Rate:

Customer Charge: Per Month	$ 2.50
First 10 M. c. f. per M. c. f.	.60
Next 90 M. c. f. per M. c. f.	.50
All over 100 M. c. f. per M. c. f.	.25

Fort Collins Producing Corporation.

Rate: 17½c per M. c. f. for all gas.

Colorado Portland Cement Company.

Rate: 12c per M. c. f. for all gas.

Valmont Plant (Public Service Co. of Colo.)

Rate: Readiness to serve, $8000 per year.
For all gas delivered, 1½c per M. c. f. plus purchase cost of gas.

Payment:

In all contracts payment for gas and service is to be made on the 10th day of the month next following rendition of service, except as to Fort Collins Producing Company, in which case payment is to be made by the 20th of the month.

General Terms:

Usual administrative provisions and some special provisions not considered material in this presentation.

"Natural gas has always been sold and is sold to every industrial user, whether on direct sale or under resale contract, at a price in excess of the purchase price paid for such gas." (Vol. 84, p. 12,569).

CONTRACTS WITH PUBLIC AUTHORITIES.

Such contracts presently in force are:

War Department (U. S.), Fort Warren, Wyoming (Ex. 104).

Dated: June 26, 1940.

Duration: To June 30, 1941, with renewal option from year to year, not extending beyond June 30, 1951.

Price: 40c per M. c. f. "not subject to revision or control by the public service organization, commission, board or regulatory body having jurisdiction over rates for services of like character."

Delivery: At Government Reservation.

Character of Service: Continuous domestic.

General: Purity and heat standards; metering and measuring; payment; and administrative provisions.

War Department (U. S.) Fort Logan, Colorado (Ex. 104).

Dated: May 26, 1930; Amendment, August 15, 1934; Current Renewal, May 16, 1940.

Duration: To June 30, 1931, with renewal options from year to year not extending beyond June 30, 1951.

Price: 40c per M. c. f. "not subject to revision or control by the public service organization, commission, board, or regulating body having jurisdiction over rates for services of character herein set forth."

Delivery: Fort Logan, Colorado.

Character of Service: Continuous domestic.

General: Purity and heat standards; metering and measuring; payment; and administrative provisions.

Department of Justice (U. S.) Prison Farm, near Fort Logan, Colorado (Ex. 104).

Dated: August 8, 1939.

Duration: "Continue in force until further notice," subject to termination on 60 days' written notice by either party.

Price: 40c per M. c. f.

Delivery: Main line meter of Company near Fort Logan, Colorado.

Character of Service: Continuous domestic, except causes beyond control of Company.

General: Metering and measuring; payment; and administrative provisions.

Federal Security Agency, C. C. C. Motor Repair Division (U. S.) (Ex. 287).

Dated: March 8, 1941.

Duration: "Continue in force until further notice," subject to termination on 60 days' written notice by either party.

Price: 40c per M. c. f.

Delivery: Outlet company meter (International Metals branch line, near Littleton, Colorado).

Character of Service: Continuous except causes beyond control of Company.

General: Metering and measuring; payment; and administrative provisions.

Board of Water Commissioners, City and County of Denver, Colorado (Ex. 104).

Dated: August 1, 1939.

Duration: Three years from August 25, 1939.

Price:

First 10 M. c. f. or less per month	$10.00
Next 90 M. c. f. per month	.40 per M. c. f.
Next 400 M. c. f. per month	.20 per M. c. f.
Next 500 M. c. f. per month	.18 per M. c. f.
All over 1000 M. c. f. per month	.16 per M. c. f.

Delivery: Buyer's plant, Jefferson County, Colorado.

Character of Service: Fuel requirements of Buyer's boiler and other industrial uses at said plant, subject to shut-off or curtailment for domestic users. Company does not "undertake to furnish the said Buyer a full and uninterrupted supply of gas."

General: Purity and heat standards; metering and measuring; payment; and administrative provisions.

Note: Summary of Pressure Bases Under Foregoing Purchase and Sales Contracts (At Assumed Temperature of Sixty Degrees Fahrenheit).

Sales

Distribution Companies	Atmospheric Pressure	Pounds
Greeley Gas and Fuel	12.14 + 8 oz. =	12.64
Highway Gas Co.	12.27 + 8 oz. =	12.77
Cheyenne Light, Fuel and Power	11.80 + 8 oz. =	12.30
Public Service Company		
Denver Fringe	12.14 + 8 oz. =	12.64
(Edgewater and Mt. Air)	12.40 + 8 oz. =	12.90
Golden	12.00 + 8 oz. =	12.50
Boulder	12.11 + 8 oz. =	12.61
Brighton, Fort Lupton, Longmont, Loveland	12.27 + 8 oz. =	12.77
Berthoud	12.14 + 8 oz. =	12.64
Johnstown	12.34 + 8 oz. =	12.84
Ft. Collins	12.22 + 8 oz. =	12.72

Direct Industrials	
Colorado Portland Cement Company	12.22 + 8 oz. = 12.72
Adolph Coors Company	12.00 + 4 oz. = 12.25
Denver Pressed Brick	12.25 + 4 oz. = 12.50
Denver Ordnance Plant	12.00 + 8 oz. = 12.50
Fort Collins Producing Corp.	12.22 + 4 oz. = 12.47
Golden Fire Brick	12.00 + 8 oz. = 12.50
Great Western Sugar Co.	12.34 + 8 oz. = 12.84
Kuner-Empson	12.27 + 8 oz. = 12.77
Producers Canning Co.	12.22 + 4 oz. = 12.47
Valmont Plant	12.10 + 8 oz. = 12.60
Public Authorities	
Fort Logan	12.14 + 8 oz. = 12.64
Fort Warren	11.80 + 8 oz. = 12.30
Federal Prison	12.07 + 4 oz. = 12.32
Water Board (Denver)	12.14 + 4 oz. = 12.39
C. C. C. Garage	12.14 + 4 oz. = 12.39
Purchases	
Colorado Interstate Company	12.4 + 8 oz. = 12.90
Kirwell Oil Co. (Berthoud Field, Colo.)	14.4 + 4 oz. = 14.65
Fort Collins Producing Corp.	12.22 + 4 oz. = 12.47

(Ex. 101, 102, 103, 103A, 104, 113, 287.)

MISCELLANEOUS CONTRACTS.

Management Contract—Henry L. Doherty & Co. (Ex. 106.)

Dated:

August 1, 1929. Accepted by Colorado-Wyoming Company August 29, 1929.

The agreement provides:

"The undersigned, as Fiscal Agent, hereby offers to continue to place at the service of your corporation, under the same terms and conditions as have been in effect for the past several years, a complete organization which has been built up in connection with the operation and development of public utility, oil and natural gas properties, making available to you the combined experience,

advice and assistance of this organization to aid you in solving such problems as may arise in connection with the conduct of your business. Among others, it is proposed to perform for your corporation, subject to the direction and control of your Board of Directors, the following service:"

These services are described as personnel, executive, general accounting, statistical, purchasing, designing and construction engineering, financial, securities department, valuation, tax department, new business department and technical and research department.

"For the above services your corporation will pay as follows:

"1. A management fee equal to one and three-quarters per cent (1¾%) of its gross revenue, after deducting Inter-Company sales for resale.

"2. An engineering fee equal to five per cent (5%) of the cost of construction."

Duration:

One year and thereafter from year to year unless terminated by either party upon ninety days' written notice (Ex. 106).

Supervisory Services Rendered.

Extensive design, construction and advisory services were made available and actually rendered to Colorado-Wyoming Company from the inception of that enterprise through the year 1937, under the terms of the foregoing contract.

Upon this point the witness HANCOCK testified as follows:

"Q. Had you had occasion to do any work for Colorado-Wyoming Gas Company prior to that time (1939)?

"A. Yes.

"Q. What was the character of that work?

"A. General engineering work involving recommendations and suggestions as to construction and building of property and conducting and operating and maintaining the property.

"Q. Did you have anything to do with any part of the construction or maintenance of this property?

"A. Yes, I was engaged in a consulting capacity in regard to the building and operation and maintenance of the property.

"Q. Of the original part of the line, the first part of the line that was built or the second?

"A. Both."

(Vol. 24, pp. 5407-5408.)

And similarly the witness F. C. HAMILTON testified with respect to services rendered by him to the Colorado-Wyoming Company, under said management contract as follows:

"From December 1, 1925 to September 30, 1935, I was a member of the Executive Committee of Henry L. Doherty & Company."

(Vol. 84, p. 12,449.)

"Q. Now, Mr. Hamilton, are you and have you been throughout the history of this company, Colorado-Wyoming Gas Company, familiar with its operations, its systems, the method under which it has been run, and the returns of the company in general, the returns that the company has enjoyed in the conduct of its business?

"A. I have, yes, sir, for the simple reason that the executive committee of Henry L. Doherty & Company had to concur in and advise with the management of all construction requisitions that exceeded $500 and had presented to them each year the estimated operating budget for the ensuing year for concurrence. Monthly those estimates were checked against the actual results and were revised or the differences explained, which gave us a background to check two things. One was to check the operating ability or the estimating accuracy of the men on the property and another one was to give my people a chance to check their estimates of construction costs which were made in advance against what actually took place.

"Q. So that you were very closely familiar with the entire construction of this company's system, both the original system between Fort Collins and Cheyenne as served by the Wellington field and the enlarged system created by the building of the line from Fort Collins to Littleton and the purchase of gas from the Colorado Interstate Gas Company at point for service of the entire system?

"A. That is true.

"Q. Have you been familiar during all of the years of the life of this company with the actual operation of this company by those in charge of its operation?

"A. From the financial results of that operation, not the detailed operation."

(Vol. 84, pp. 12,455-12,456.)

The Commission's witness VAUGHT, who made an extensive study of the Company's plant account (Ex. 199), stated on cross-examination that in connection with the plant account of Colorado-Wyoming Company, after the elimination of the 5 per cent engineering, there are no charges of any kind covering designing and construction engineering in any amount, so far as he knew (Vol. 66, pp. 9541-9543). He also testified that so far as he knew the Company did not have at any time any purchasing department for the purchase of pipe and large supplies (Vol. 66, p. 9543).

The qualifications of the witness Hancock as a consulting, designing and construction engineer and of the witness Hamilton, as a construction and valuation engineer, are, as testified by them, hereinafter set forth.

* * * * *

Service Contract—Petroleum Advisers, Inc. (Ex. 106).

Dated:

January 1, 1938. Accepted by Colorado-Wyoming Company July 19, 1938.

The agreement provides:

"The undersigned, *Petroleum Advisers, Inc.* (hereinafter called the 'Advisers') has a staff and organization of executives, accountants, financial and technical advisers of wide experience in the petroleum industry operating in interstate commerce, which organization has been built up over a long period of years for the purpose of making available to companies engaged in the various branches of the petroleum industry the combined experience, advice and assistance of such staff in connection with the problems arising in the conduct of your business and of rendering services of the nature hereinafter outlined.

"Advisers proposes to supply services for operating companies (hereinafter styled 'Operating Companies') including your corporation, subject to the direction and control of your Board of Directors, of the following nature:"

These services are described as executive, auditing and accounting, statistical, purchasing, construction supervision, financial, budget, valuation, rate, tax, sales and promotion advice, insurance, technical and research, secretarial, personnel, advertising and transfers and special services.

The agreement continues:

"*Compensation.*

"*Advisers will render the foregoing services to corporations signing this and similar contracts at cost to it of rendering the same.* Direct charges shall be made so far as costs can be identified and related to the particular transactions involved without excessive effort and expense. There shall also be paid to Advisers the out-of-pocket expenses incurred by the personnel of our staff while at the properties of your corporation or traveling to or from them, or while engaged upon work for your corporation on special matters.

"It is proposed to enter into contracts similar to this with other Operating Companies engaged in a business similar to that of your corporation which are subsidiaries of Cities Service Company. Advisers agree that during the term of this contract it will render no service to any company for compensation which shall be less than the cost of rendering such service.

Billings and Payment.

"As soon as practicable after the close of each month (herein termed the 'current month'), Advisers will determine its total expenses for the current month, including all overhead. Advisers will also compute the direct charges, if any, to be made for the current month. . . . Advisers will thereupon deduct from the amount of its total expenses for the current month, the amount of all direct charges to be made for the current month, whether or not to companies which are parties to this or similar con-

tracts. Having thus determined the balance of expense for the current month (i. e. total expenses for the current month less direct charges for the current month) Advisers will then pro rate such balance of expense among the companies having this or similar contracts, based upon the ratio when, for the month preceding the current month, the gross operating revenues of each of such companies bears to the aggregate gross operating revenues of all such companies. In determining gross operating revenues, there shall be deducted all payments made for purchases for resale purposes from any other company having an agreement with Advisers similar hereto. Advisers will thereupon bill your corporation for:

"(a) the amount of any direct charge to be made to your corporation, and (b) your corporation's pro rata share of said balance of expense.

"The amount set forth in such bill shall be payable by your corporation to Advisers forthwith upon receipt of said bill by your corporation.

"Determination and allocation of cost will be made pursuant to Rule 13-32 or any other applicable rule, regulation or order of the Securities and Exchange commission, or in the absence thereof in accordance with sound accounting methods of determining cost.

"In the case of services for which a direct charge is made, the cost will consist of salaries of officers and employees of Advisers for time actually spent on service, plus out-of-pocket expenses, plus a fair and equitable proportion of Advisers' overhead.

"'Out-of-pocket' expenses shall include telegraph tolls, long distance telephone charges, postage, express, travelling and hotel expense, printing, mimeographing and photostating expense extra compensation paid for overtime and meals, and other similar charges.

"'Overhead' shall include the salaries of bookkeepers, secretaries, stenographers, file clerks, messengers and similar employees, rent, light, telephone, insurance, taxes, interest, general supplies, depreciation and other such miscellaneous expenses.

"Any charges based on estimated cost will, at least annually, be readjusted to cost as determined in accordance with sound accounting methods of determining cost."

Term of Contract:

"Services will be performed and paid for as herein set forth commencing January 1, 1938 until the termination of this contract as hereinafter provided. This agreement may be terminated by either party after giving sixty days' written notice of its intention so to do to the other.

"This agreement will be subject to termination or modification at any time to the extent that performance may conflict with any rule, regulation or order of the Securities and Exchange Commission, adopted before or after the making of this agreement which may be applicable to either of the parties hereto.

"This agreement shall be subject to the approval of any State Commission or other State regulatory body whose approval is, by the laws of said State a legal prerequisite to the execution and delivery or the performance of this agreement."

Company Exhibit No. 111 (Appendix this Record).

PLANT, PROPERTY AND BUSINESS OF COLORADO-WYOMING GAS COMPANY AND THE VALUE THEREOF.

(1) ALL PROPERTY.

(a) *Physical Plant and Overheads* (Ex. 111).

J. L. WILLARD, rate and valuation engineer (whose qualifications and experience are set forth herein under the subject "Depreciation"), a witness for Colorado-Wyoming Company, testified on "the value of the plant" of that Company.

He identified Exhibit 111, entitled "Determination of Property Value" (see Appendix) and in statement attached to said exhibit testified:

"This exhibit sets forth the value of the plant of the Colorado-Wyoming Gas Company, as of September 30, 1940 to which is added the amount necessary to complete

current 1940 construction of the Arapahoe Compressor Station and the additional amount required to complete that station in 1941 to its ultimate capacity of 1200 H. P. Necessary Working Capital also is included. These several items are shown on statement No. 1, respectively as $1,747,865, $9,688, $35,000 and $45,490, which amounts to a total of $1,838,043.

"A further detail of the property included in Statement No. 1 is listed in Statements No. 2, No. 3 and No. 4. Statement No. 2 is a summary by accounts of the property of the company and shows in total for each account the construction costs of the property together with the amounts remaining after deduction has been made for existing depreciation. The total of the Plant and Investment as of September 30, 1940 is $1,894,421.54 and after making deductions for existing depreciation results in a total of. $1,747,864.89.

"Statement No. 3 shows the kind and type of property included in each account and the depreciation applicable thereto. Account 1000 details all the parcels of land owned by the company and the cost of each tract. The remaining accounts are similarly shown; some in general summary form and others of major importance in detail.

"Account 1013 includes all the costs of material and labor necessary in the installation of all main and branch lines. The system consists of a main 10¾" O D line extending about 30 miles from Arapahoe Measuring Station near Littleton at which point gas is purchased from the Colorado Interstate Gas Company, to a point about 7½ miles east of Boulder, Colorado. From this junction to Fort Collins, a distance of about 43 miles, 8⅝" O D pipe is used. Approximately 41 miles of 6⅝" O D main extends from Fort Collins to Cheyenne, Wyoming. The Branch lines in general consist of the Boulder Branch of 6" and 8" pipe, 7½ miles long; the Brighton Branch consisting of 2" and 3" pipe, 21 miles; the Colorado Portland Cement Branch, a 6" line, 3¾ miles; the Greeley Branch, 22½ miles of 6" pipe; the Johnstown Branch, a 6" line, 3½ miles; the Valmont Branch, an 8" line slightly over a mile in length; the Golden Branch, a 4" line.

8¾ miles and the Fort Lupton Branch, a 2" line, 2¼ miles in length. In addition to the lines above mentioned, numerous other small lines extend from the main or branch lines. The amount in this account comprises approximately 80% of the cost of the entire system. Details for each main line and the major branch lines indicate the footage of each kind and size of pipe. The cost of the major lines and applicable depreciation is listed individually.

"Account 1014 includes the total charges for material and labor in connection with compressor stations. The aggregate of this account amounts to about 12% of the entire system. At present there are two active compressor stations and one which is nearing completion of construction. One station is located at Arvada and consists of 6 twin gas engine compressors of 470 H. P. each together with the necessary auxiliaries. A second station is located near the town of Wellington, Colorado. This station has 4 single gas engine compressors of 85 H. P. each. The station under construction is located near Littleton, Colorado and is known as the Arapahoe Station. This station includes one angle type vertical compressor of 600 H. P.

"Since the Arapahoe Station was under construction as of the date of this study, only the cost of the work completed as of that date is included in Statement 3.

"For the Arvada and Wellington Stations, certain detail of the buildings and equipment at each station are shown, together with the construction cost and existing depreciation applicable to each.

* * * * *

"Depreciation as applied in Statement No. 3 is on a basis of the existing observed depreciation. Most of the factors necessary to calculate the amount of depreciation were obtained from H. D. Hancock, Natural Gas Engineer, and President of Gas Advisers, Inc. of New York, who has made an exhaustive study of the system for that purpose. Depreciation as applied to certain of the accounts such as automobiles, office equipment, telephone lines, etc., was the result of my own calculation.

In conjunction with Mr. Hancock, I have weighted certain of his studies for application. Other conclusions have been applied directly to the physical property values, resulting in the computed amount of existing depreciation as tabulated in the column headed "Depreciation Deducted" on Statement 3.

"Statement No. 4 reflects the build-up of the plant account by years from 1925 to September 30, 1940. The tabulation shows the total net amount of plant and investment by year ending figures, together with the final as of September 30, 1940, which latter amount was used as the starting point of the exhibit. It will be noticed that the Colorado-Wyoming Gas Company had two major construction periods, the first from 1925 through 1927, and the second from 1929 through 1931.

"The totals of each account in Statement No. 3 for plant and investment and less depreciation have been carried forward to Statement No. 2. The total of the depreciated costs of all accounts in Statement No. 2 has been brought forward to Statement No. 1 and appears as the first item on that statement. Also, on the first statement, are amounts of expenditure necessary for the completion of Arapahoe Compressor Station. From payments already made and considering invoices now on hand together with an estimate of expenses yet to be incurred in 1941, I have calculated an amount of $9,688 for the completion of the first phase of this construction. The addition of a second compressor with the necessary auxiliaries has been added as a 1941 expenditure of $35,000.

* * * * *

"The total of the statements amounts to $1,838,043 which represents the depreciated value of the present existing property together with additions current in the immediate future and working capital."

(Vol. 25, pp. 3533-3542.)

On cross-examination the witness testified: In commencing his work in connection with Exhibit 111, he first made inventory of all the property of the Company, and upon completion of the field notes of the inventory a complete

compilation of invoices having to do with construction was undertaken. The purpose of this was to obtain every expenditure the Company had made in connection with construction, to allocate each of such expenditures to various jobs that they had been charged to, and eventually to charge them to the various items under which they belong. The witness did a large portion of this work himself, although part thereof was prepared under his direction by Mr. F. M. Cropper, who has been associated with the Cities Service interests since 1913, and who has made valuations in probably every state of the United States; by Mr. E. M. Harms, also a valuation engineer who has been connected with Mr. F. C. Hamilton's organization since 1927; and by Mr. Sigrud Jorgensen, who is a member of the accounting division of Electric Advisers, Inc.

The witness has made many valuations and cost studies. In connection with all valuation work there is necessarily involved the problem of the capital amount of the Company. It is necessary to investigate the charges to all construction job orders, the posting of those charges to the various capital accounts, examine the actual purchase vouchers, and see posting of those vouchers to a job order; and in this manner carry the whole study through to a final charge to a particular capital account, in order to verify that the property covered in the physical inventory is actually recorded on the books of the Company, and thus finally to obtain the actual and the original cost of those items.

(Vol. 25, pp. 3542-3551.)

The written statement preceding the exhibit was prepared by the witness himself. (Vol. 25, pp. 3551, 3552.)

"Q. Does Statement 1, 'Plant and Investment,' September 30, 1940 as $1,747,865 appear as per books of the company?

"A. As per books of the company less observed depreciation.

"Q. Less observed depreciation?

"A. That is right.

"Q. You don't have that listed and so set forth on Statement 1.

"A. Not in that particular wording, no.

"Q. Just preceding that I want to ask you this: What do you mean by the wording 'Present value' that you have at the head of Statement 1?

"A. That means my interpretation of the present value of the physical property of the Colorado-Wyoming Gas Company, adding to the cost of actually existing property those costs which are immediately pending in construction of a compressor station, and also adding to it the cost of working capital, all of which costs should be considered in determining a rate base.

"Q. And less the observed depreciation that you got from Mr. Hancock's exhibit?

"A. That isn't reflected on Statement 1, but the results of his observed depreciation is indicated by the difference in the two figures on Statement 2, and the actual details compiled from his calculations are indicated in Statement 3."

(Vol. 25, pp. 3552, 3553.)

"Q. Now, then, going back to Statement 1 again, I notice that under Arapahoe Station you have an item of Additional Compressor for the year 1941. Do I understand it correctly that you are including that under your designation and definition of present value of property of the Colorado-Wyoming Gas Company?

"A. As far as the purposes of this case is concerned, I am, yes, sir.

"Q. In what respect?

"In considering the necessary elements to find a rate base you not only consider the value of the actual existing property of the particular moment but have to also look into or give consideration to expenditures that are definitely current and that is what these expenditures are.

"Q. Well, is that the same reason that you include under your definition of 'Present Value' these commitments for 1940 that you have on Statement 1?

"A. That is right.

"Q. And also the 'Working Capital' on Statement 1?

"A. That is right.

"Q. Although 'Working Capital' the way you have analyzed it, is presently being used or is presently necessary

in the operation of the company as it is now existing?

"A. That is right. That is based on expenses current in the operation of the company.

"Q. And it is your impression that the way you define 'present value' and set it up here that this item of additional compressor stations for 1941 is necessary and is to be included in this Statement 1 where you put it?

"A. I felt that since the additional expenditures in the future were so few in number and minor in total amount, that it wouldn't be advisable or necessary to make a separate exhibit in order to reflect them as a part of this case, so I entered them as part of Statement 1.

"Q. You might have put any other possible requirements under Statement 1, too. Would you have determined the present value also if in your opinion it was necessary to be included in the preparation of a rate case?

"A. The term 'present value' is just a name. That could also be plant investment less depreciation plus working capital and commitments. It really doesn't mean that this is a value that represents a fair sale price, one party to another; it is just a name attached to this total which represents the physical property of the company less depreciation plus current expenditures and working capital."

(Vol. 25, pp. 3554-3555.)

"Q. Well, if you were to set up an original cost statement, under Statement 1, instead of the language 'Present Value,' how would you set it up?

"A I would label it 'Original Cost.'

"Q. And what items would you have appear on Statement 1?

"A. Well, it would be the total as calculated for original cost without any consideration for depreciation.

"Q. You would still have this additional compressor for the year 1941 included?

"A. If I were presenting that figure as an exhibit in connection with a rate case, I would include the additions either as a part of that figure or would show them separately in another exhibit as items that I feel are necessary to consider in a case of this kind.

(Vol. 25, p. 3559.)

"Q. And what authority, or, rather, what officials of the company apprised you of the necessity of this additional unit for the year 1941?

"A. The operators and—

"Q. Who do you mean by the operators?

"A. Mr. Thackrey and Mr. Davis and Mr. Shortess all advised me that this unit is going to be installed in 1941, and I have also been in conference with those three, together with Mr. Hancock.

"Q. Did they also give you a breakdown of the total, which you have here of $35,000?

"A. In a general way, yes, sir.

"Q. Well, you wouldn't just put that lump sum in there unless you had a pretty complete breakdown of it, would you?

"A. Well, the breakdown is practically all in the cost of the compressor, and the expense of incidentals in connection with a compressor installation, the cost of the foundation, the cost of the installation and auxiliaries, it has been determined that the total expenditure will be $35,000.

"Q. Installed?

"A. That is right."

(Vol. 25, p. 3561.)

"Q. Now, then, this depreciation that you have set up on Statement 2 and applied to the plant and investment there, is the dollar figure computed from the per cent condition that Mr. Hancock set up in Exhibit 107?

"A. Yes, sir.

"Q. To go with what else?

"A. To go with some of my own calculations."

(Vol. 26, p. 3566.)

The calculations as to per cent condition above referred to as having been made by the witness were: Arapahoe Compressor Station, office furniture and equipment, including calculating machines and typewriters, automobiles and trucks, miscellaneous tools, and telephone lines. (Vol. 26, pp. 3566-3586.) (Note: The study of per cent condition of these items of property is abstracted elsewhere herein under the subject of "Depreciation".)

In Exhibit 111, no consideration was given to anything set up on the books of the Company for depreciation. The exhibit is based strictly on observed depreciation. (Vol. 26, pp. 3620-3624.)

The breakdown of Account 1021, General Construction Expenditures $91,619.13, in Statement No. 4 of Exhibit 111, was:

Item 1. (1925-1926)

Miscellaneous Construction Expenditures	$ 6,541.87

Item 2. (1929-1930)

General Overhead Expenses	5,714.74

Item 3. (1930-1931-1932)

Interest	79,362.52
Total	$91,619.13

(Exhibit 112.)

Item 1 thereof consists of "General expenditures during construction that were not distributable to various accounts at the time they were incurred, but in the main they were incurred in connection with the construction of the original project around Fort Collins, Wellington and Cheyenne. They amounted to $6,541.87." (Vol. 26, p. 3588.)

Item 2 in the account "is an amount for general expenses capitalized, $5,714.74. These are charges during 1929 and 1930 to certain job orders under construction at that time, and were for the expense of executive officers, clerical help, and probably a portion of the rent that was charged by the officers to construction." (Vol. 26, pp. 3590, 3591.)

Item 3 is "$79,362.52, which is a charge made on the books of the Company during the years 1930, 1931 and 1932 for interest on non-productive capacity of their plant." By the phrase "non-productive capacity," the witness said, he meant "that the system is designed and built to take care of a future load, and that the system as a whole did not go into operation at the time job orders were closed and interest was charged on the basis of actual usage of the project as compared with what it was designed to serve."

(Vol. 26, pp. 3591, 3592.)

The witness pointed out, by the way of illustration, that the 10-inch main line from Littleton to Boulder Junction was not built to serve the City of Boulder, but was designed to serve everything from Arapahoe Station to Cheyenne, Wyoming. Boulder, however, being one of the points of service upon the 10-inch line, construction of the branch line to Boulder was completed at an early date, and gas was served through the 10-inch line to supply that branch line, but service was rendered through the line to communities north in northern Colorado and Cheyenne, Wyoming; and before the project was complete and, under this concept, the line was placed in "partial use" and service to Boulder commenced in October, 1929. (Vol. 26, pp. 3592-3604.) Witness defined "interest during construction" as "the cost which attaches itself to the funds necessary for the construction of the project." (Vol. 26, p. 3604), and then pointed out:

"*The Witness:* * * * This project from Littleton to Fort Collins and all inter-connected lines was one complete construction project in itself and was not equipped to operate to its capacity until all construction was complete. The final construction of that project was not completed until September 1, 1931, when the final units at Arvada compressing station were available for operation; and the system could not deliver the gas that it was going to deliver until such construction was completed, and in that sense I believe that a large portion of this interest that has been referred to as interest on non-productive capacity could rightly be called and should be called interest during construction."

(Vol. 26, p. 3609.)

* * * * *

Q. Now, Item 1021, General Construction Expenditures, $91,619.13. How did you arrive at this dollar figure on depreciation?

A. I arrived at that figure by taking the average depreciation of all of the accounts prior to that account with the exception of Organization. That is an amount of money that is expended in connection with the construction of the

company and probably should have been distributed among the various accounts, however, it just wasn't feasible at the particular moment to distribute it, and it appears on the books of the company as an individual account, so I tabulated it in that manner and depreciated it as I have told you.

Q. You have that account set up on Page 9 of Statement 3?

A. Yes, sir.

Q. Will you give us a breakdown of that $91,619.13?

A. In the main that account consists of three items. They were general expenditures during construction that were not distributable to various accounts at the time they were incurred, but in the main they were incurred in connection with the construction of the original project around Fort Collins, Wellington and Cheyenne. That amounted to $6,541.87.

Q. Is that your complete breakdown on that one item?

A. No. I think I can go into each item that comprises that $6,541.87.

Q. Let's have the breakdown on that part.

A. Well, the first item charged in 1926 was toll calls, $2.65; blueprints and drawing instruments, $8.81; miscellaneous expense in New York office was $398.85.

Q. Just give us the major ones. It is not necessary to state the smaller ones.

A. There is a charge from the Public Service Company of Colorado for services and expenses of Davis & Castor if I read this correctly, in the amount of $649.22.

There is a charge for the expenses of Mr. Burnham and Mr. Shortess, in the amount of $515.67.

There is a charge for Henry L. Doherty & Company, services and expenses of engineer and superintendent, $712.43.

Q. Is that Henry L. Doherty & Company charge an engineer's fee?

A. No, this is services and expenses of some engineer who was probably out here consulting on a job, or in connection with certain phases of construction.

Q. All right.

A. In the main—

Q. In that charge to Henry L. Doherty & Company, are there any fees included in that figure at all in this exhibit?

A. By "fees," you mean just what?

Q. Fees paid out to anyone or to Henry L. Doherty & Company for engineering services.

The Trial Examiner: You mean service fees, Mr. Lange?

Mr. Lange: Any kind of fees; if they are labeled engineers or services of any character—

The Trial Examiner: Any other fees than the ones he just read?

Mr. Lange: That is right.

The Witness: I see no fees in here with the exception of those for services of individuals or legal fees in connection with Henry L. Doherty & Company's charges.

By Mr. Lange:

Q. Which are the legal fees or other fees you haven't read in that account?

A. Well, going through certain of these charges there are services of an engineer, Henry L. Doherty & Company, $482.14; services and expenses of engineer and superintendent, $712.43; services of resident agent, $52.20; service and expense of C. J. Shortess, $14.55; services of Robinson & Sloan — by the way, that is a legal firm in New York— which amounted to $31.83.

I see nothing in this account that is a fee for other than services of some individual.

Q. All right. Proceed further with the breakdown on that Account 1021.

A. A second item incurred in the account in an amount for general expenses capitalized, $5,714.74. Those are charges during 1929 and 1930 to certain job orders under construction at that time and were for the expense of executive officers, clerical help and probably a portion of the office rent that was charged by the officers of the company to construction.

Q. Do you know how that item was arrived at, the total of it?

A. No, I have the charges to the various job orders, just how the calculation was made, I don't know.

Q. You don't know on what basis the calculations were made?

A. No, I imagine some investigation was made as to an appropriate amount of charge to construction that was necessary due to the work going on at that time requiring the services of the officers and clerical help of the company in posting job orders and things of that nature.

Q. In your investigation of that item, did you find out whether they kept time records on that or not?

A. No, sir, I didn't.

Q. Now, the next item.

A. The next item is an item of $79,362.52, which is a charge made on the books of the company during the years of 1930, 1931 and 1932 for interest on non-productive capacity of their plant.

Q. What do you mean by non-productive capacity of the plant?

A. I mean that the system is designed and built to take care of a future load and that the system as a whole did not go into operation at the time job orders were closed and interest was charged on the basis of actual usage of the project as compared to what it was designed to serve.

Q. Wasn't all of the equipment, the main line equipment, in use at that time? Wasn't it actually in use?

A. No, I wouldn't say—

Q. The main pipe line was not in actual use?

A. Portions of it were partially in use.

Q. What portions of it?

A. Well, the line from Littleton to Boulder Junction and on in to Boulder started partial use in October, I believe, 1929.

Q. All right. What do you mean by "partial use?"

A. Well, the 10-inch line from Littleton to Boulder Junction was not built to serve Boulder. Naturally, when the line was completed into the city of Boulder a portion of the construction costs of that line went into service but not all of the construction cost went into service when they started supplying Boulder.

Q. Not all of them went into service?

A. No.

Q. Why?

A. For the simple reason the line was designed to serve gas north of Boulder and the lines connecting at Boulder Junction with Fort Collins and Greeley and other points in that neighborhood were not completed at that time.

Q. What was that 10-inch line built to serve?

A. The entire system north of Littleton.

Q. The entire system north of Littleton?

A. That is correct.

Q. What effect did Valmont have on that service?

A. I don't believe a line was built to Valmont until 1936, if I remember it correctly.

Q. Until 1936?

A. Yes.

Q. Now, your description of excess capacity of the line and equipment, is that what you say this item of interest covers?

A. I would say that it was non-productive capacity, non-productive costs.

Q. In other words, as the line was built it had to gradually build up to the capacity of use the line would be put to?

A. As far as serving towns are concerned and carrying an amount of gas that it is designed to carry, yes.

Q. In other words, if you had a 10-inch line and started out in service pumping through it only fifty per cent of its capacity, and then in later years it had pumped through it ninety per cent of its capacity, there was an excess there in that interim?

A. That is right. It would be the prudent investment of the company to put in a line which they expected to serve an ultimate capacity rather than to put in a line that would serve the capacity then on hand. That 10-inch could have been displaced, you might say, by an 8-inch line to serve the capacity that was required for that period of years. The 8-inch line would have probably cost 75 to 85 per cent of the cost of the 10-inch line, but the company deemed it wise to install a larger line and invest more money in order to avoid a higher construction cost due to the necessity of paralleling the line with other lines as increased load came on.

Q. In other words, it would have been mighty poor operating practice to put in an 8-inch line there and later have to replace it with a 10-inch line?

A. No, I would say that it was smart operating to put in the 10-inch line.

Q. I say, it would have been poor operating practice to put in the 8-inch line and wait for later development than to put in the 10-inch line.

A. You might say that.

Q. In other words, on your theory there was an excessive capacity there to start off with?

A. That is correct.

Q. Why didn't they put in an 8-inch line there? Was it because it would have been poor operating practice?

A. Because they are — the people who constructed this line were experienced operators and in their judgment they deemed it wise to put in higher initial cost in the investment with the idea of cutting down the ultimate total cost.

Q. All right. Did you take into consideration—strike that.

Do you know what the company's earnings were at the beginning of the first year's operation, and then on down?

A. No.

The Trial Examiner: Mr. Lange, before you go into that I would like to get straightened out on this line to Boulder.

Mr. Willard, did I understand you to say that when that extension was made to Boulder that the purpose of it was to serve some points beyond?

The Witness: Oh, yes. The 10-inch line was designed to serve everything in the North system.

Mr. McCreery: May I interject there?

The Trial Examiner: Yes.

Mr. McCreery: I think perhaps there is a confusion in Mr. Grey's mind as between the main line to Boulder junction and the branch line from the junction to the city of Boulder. I think that is what he has in mind.

The Trial Examiner: You are speaking of this (indicating Exhibit No. 50)?

The Witness: I was speaking of the 10-inch line that runs from the Arapahoe measuring station up to Boulder junction. It was designed to serve the entire North system, but, Boulder, being one of the near points at the end of the 10-inch line, had its construction of branch line completed at an early date, and, naturally, gas was served through the 10-inch line to supply that line, but the project was not complete.

The Trial Examiner: In a project of this kind, where your construction is new, you make provision for the normal growth of business from year to year, don't you, up until the time you level off at a certain period, say, five years after the construction?

The Witness: That is the wise thing to do, yes, sir; but you may not be able — you may not be using the actual money that you put into the construction of that design.

The Trial Examiner: That is true, but your construction, nevertheless, has been entirely completed of the whole system?

Mr. McCreery: May I make a suggestion here? I think perhaps the Examiner misunderstands the distinction between full utilization in a territory and the period prior to the time there is full utilization in the communities. It isn't a matter of growth, it is an extension of the actual use of the line as first premised, and not the continued growth of the gas load. For instance, in the city of Fort Collins, at the outset it didn't even serve Fort Collins because the line wasn't even built, and the compressor capacity wasn't in even to complete Fort Collins on its then present demand, so there are two points involved there, Mr. Examiner, that I think the witness is trying to state.

The Trial Examiner: That is all, Mr. Lange.

By Mr. Lange:

Q. Mr. Willard, in connection with this particular item, did you take into consideration, or have you since then learned what the company's earnings were from the very beginning

A. No, I haven't.

Q. On all of its property?

A. No, I don't know that.

Q. You gave that no consideration in determining whether this interest on excessive capacity was proper or not from an accounting standpoint?

A. That interest on non-productive investment was capitalized by the officers of the company; was made by them, and no doubt it was considered by them good accounting practice. I think your new Federal Power Commission classification indicates that when the good judgment of the officers has been used in the past that changes should not be indicated.

Q. Would you point that out in the Uniform System of Accounts?

A. I think a good illustration of that is the necessity of a two-way street on Page 37. The fourth line starts out: "It is likewise not intended that adjustments shall be made to record in gas plant accounts amounts previously charged to operating expenses in accordance with the Uniform System of Accounts in effect at the time or in accordance with the discretion of management as exercised under such uniform system of accounts."

That has to, of necessity, be a two-way street.

Q. All right, let me ask you this: In your experience in accounting work, where have you found it *justifyable* to set up under General Construction Expenditures interest on unused capacity of plant or excess capacity, or whatever you want to term it?

A. I have experienced a situation in a conversation with a Federal Power Commission accountant where he said that the Commission would probably allow or would allow, and he would include interest capitalized on an item.

Q. Who was the accountant?

A. Mr. Smith, I believe his name is.

Q. What Mr. Smith?

A. I don't know his name but he is now in Joplin, Missouri. He is going over records there.

Q. When did you see him and where?

A. I have talked to him three or four times.

Q. I mean in connection with that particular statement?

A. I didn't personally talk with Mr. Smith in connection with that statement.

Q. Then it is hearsay?

A. He did make a statement to one of my associates along that connection, that associate conveying the information to me.

Q. Your associate then told you?

A. That is correct.

Q. You did not hear this Mr. Smith make that statement yourself?

A. No, I didn't.

Q. Who told you that he had made it?

A. My associate.

Q. Who?

A. Mr. Allen.

Q. Who?

A. Mr. Allen.

Q. What are his initials?

A. H. M. Allen.

Q. H. M. Allen?

A. Yes.

Q. Where is he now?

A. Joplin.

Q. Is he still with your organization?

A. Yes, sir.

Q. What are the initials of this Mr. Smith?

A. I don't know.

Q. Who is he employed with at the present time?

A. The Federal Power Commission.

Q. Who?

A. The Federal Power Commission.

Q. At present?

A. At present.

Q. Joplin, Missouri?

A. Unless he has moved from there within the last week or so.

Q. Where was he stationed before he went to Joplin, Missouri?

A. I have no idea.

Q. Where did this associate of yours speak with him?

A. In Joplin.

Q. And on what work was he at that time?

A. It was in connection with the original cost study of that property.

Q. At approximately what time was that?

A. Oh, it was sometime between — it was during the months of September or October.

Q. What year?

A. This year.

Q. This year?

A. Yes.

Q. This Mr. Smith you speak of is not Mr. Kenneth Smith who is connected with the Denver Regional Office of the Federal Power Commission, being present in this court room at this time?

A. No, sir, it is not that Mr. Smith.

Q. It is not Mr. C. W. Smith who is chief of the Bureau of Accounts under the Federal Power Commission in Washington?

A. I am sure he wouldn't be the Mr. Smith conducting the examination on the books in Joplin.

Q. What character of work was this Mr. Smith doing?

A. He is the accountant for the Federal Power Commission. He came to Joplin to review certain work that had been done there in connection with the filing of the 2D statement of the Federal Power Commission on the property of the Empire District Electric Company.

Q. Is it from that character of hearsay information that you formed any opinion as to how to construe the Uniform System of Accounts for natural gas companies?

A. No, no.

Q. You gave that as an indication of how certain portions of these accounts may be construed?

A. Well, I think this statement here on Page 37, as I said — it has to work both ways, and this amount was charged by the officers of the company at the discretion of the management, and I think it is a proper and correct charge.

Q. When you boil their item of interest on unused capacity or excess capacity you get right down to one of the bases of the old shop-worn going concern value estimate: that is what it is, pure and simple?

Mr. McCreery: I object to that as calling for a legal conclusion.

Mr. Lange: Do you want me to eliminate the phrase "shop-worn"?

Mr. McCreery: No. —

The Trial Examiner: I think Mr. Willard with his experience can answer the question.

The objection will be overruled.

The Witness: I have seen statements of going concern value built on the basis of what is sometimes termed idle plant, but in the main, going concern value appears to me to be that cost that attaches itself to a property due to the fact that it has a seasoned operating organization; is doing a successful business and earning a return which in itself attaches to the value of that property an amount for going concern value.

By Mr. Lange:

Q. It is an item that has very frequently been computed in and made a part of an estimate of going concern value?

A. I have seen it made a part of it, yes, sir.

Q. Have you ever included it in any of your valuations?

A. Going concern value?

Q. Going concern value.

A. Yes, sir.

Q. Strictly in—strike that.

I believe you stated that that was first set up on the company's books in this case — in these proceedings, rather — during the years 1930, 1931 and 1932?

A. That is correct.

Q. Why didn't they set it up right at the beginning when there was the most excessive capacity present?

A. Well, the job order or the construction was in progress — the job orders were not closed — and interest was charged to the construction job order.

Q. Well, it was set up in three separate parcels, wasn't it?

A. Only so far as the three separate parcels were computable.

Q. This, of course, is not interest during construction that is usually an accounting practice, or is it?

A. No, I would say this is interest on non-productive capacity.

Q. What is interest during construction?

A. Interest during construction is the cost which attaches itself to the funds necessary for the construction of the project.

Q. And this so-called interest on excess capacity or non-used capacity of the plant would still be properly set up, even if the earnings of the company from the very beginning were sufficient?

A. I don't think the earnings have any bearing as to whether interest should be set up or not.

I think I would like to correct a statement I made a moment ago about this being strictly non-productive interest. This project did not go into full operation until the entire system was completed, and that was not completed until in March 1930 when I believe the first interest on this capacity was computed.

Q. Well, why did you stop during 1931? Why didn't you keep on setting up some factor of interest on some excess capacity as you kept on building up and until you reached some limit? Why did you stop in 1932?

A. I can't answer that as I don't know.

Q. Had it reached the so-called capacity in 1932?

A. I wouldn't be a bit surprised; that is, with the exception of probable economic depression that had some effect on it.

Q. Then when it went down, why didn't you set it up again when there was an economic depression and when it didn't use its capacity?

Mr. McCreery: This witness isn't setting up anything, Mr. Lange.

Mr. Lange: I am asking him—

Mr. McCreery: May I finish, please, Mr. Lange?

Mr. Lange: Pardon me.

Mr. McCreery: The question is wholly irrelevant as to any testimony this witness is giving.

Mr. Lange: This witness has stated that he knows accounting practice, and he has set up a very complicated exhibit, attempting to justify the inclusions of items over a certain period and I want to know what his reasons are.

The Trial Examiner: Some of your questions, Mr. Lange, go into the action of the management at a time which this witness would have no knowledge or conception—

Mr. Lange: He is giving his reason, Mr. Examiner, why such items would be justifiably set up.

The Trial Examiner: I think it is perfectly proper for you to approach the matter on that basis.

Mr. Lange: That is what I want from him, the information as an accountant.

The Trial Examiner: Restate the question, Mr. Lange.

By Mr. Lange:

Q. Why as an accountant haven't these items of interest on excess capacity been set up beyond 1932 on the company's records?

Mr. McCreery: I object to the question as irrelevant, not proper cross examination, and it has nothing to do with the testimony of this witness.

The Trial Examiner: You say, why as an accountant these items set up —

Mr. Lange: In the proper accounting practice in the light of the experience of this company and in the operations he has studied.

The Trial Examiner: Do you mean by that, Mr. Lange, you want this witness to state whether or not the item should have been set up or should not have been set up, in his opinion?

Mr. Lange: Whether in proper accounting practice, if that item were set up in 1933, whether it would have been a proper item.

Mr. McCreery: This witness is not testifying on the theories of accounting. He has not testified along the lines about which Mr. Lange made inquiry, and I object to it.

The Trial Examiner: Necessarily, Mr. McCreery, he must have some knowledge of accounting in undertaking--

Mr. McCreery: I wasn't seeking to discount that, Mr. Examiner.

The Trial Examiner: Objection overruled. Can you recall the question now, Mr. Willard?

The Witness: No.

The Trial Examiner: Will you read the question, Mr. Reporter?

(The question referred to was read by the reporter, as set forth above.)

The Witness: I don't believe it would have been a proper item because of the fact that I feel that at the end of 1932 the system had reached its somewhat normal expected load and there was no additional non-productive capacity except that produced by economic conditions after that time.

By Mr. Lange:

Q. On what basis do you say that the company had reached its normal expected load at that time?

A. I have observed the deliveries of gas of the system and it is my recollection that during the period of 1932, discounting the fact that the country at large was going through a depression, I think that the system had had or would have reached its capacity at that time.

Q. Well, now, in this—

The Trial Examiner: Just a moment, Mr. Lange.

We will stand in recess for five minutes.

(At this point a short recess was taken, after which proceedings were resumed as follows:)

The Trial Examiner: The hearing will be in order.

The Witness: Mr. Examiner, I would like to correct one statement I made and amplify another one.

Some time back Mr. Lange asked me if there were any fees included in that portion of Account 1021 which amounts to $6,541.87. I did overlook one item in here that is a five per cent New York engineering charge amounting to $101.82 that is a part of that total fee.

By Mr. Lange:

Q. Paid to whom?

A. Paid to Henry L. Doherty as fiscal agent for Cities Service Company.

Mr. McCreery: That is under the management contract, Mr. Lange.

The Witness: And there is another little amplification on a statement in regard to this interest. This project from Littleton to Fort Collins and all inter-connected lines was one complete construction project in itself and was not equipped to operate to its capacity until all construction was complete. The final construction of that project was not completed until September 1, 1931, when the final units at Arvada compressing station were available for operation; and the system could not deliver the gas that it was going to deliver until such construction was completed, and in that sense I believe that a large portion of this interest that has been referred to as interest on non-productive capacity could rightly be called and should be called interest during construction.

By Mr. Lange:

Q. Interest during construction?

A. Yes, sir.

Q. You stated a while ago that that was an entirely different item.

A. I stated that interest during construction was interest on construction funds during the construction of the project and this project was not complete in its construction until those final units at Arvada were ready for service.

Q. I understood you to say that these items in this exhibit are reflected as per company books.

A. They are the figures that are o the books of the company.

Q. Isn't it a fact that the company's books and records do not call it interest during construction?

A. I believe that is correct, yes, sir.

Q. And what do the books and records of the company call it? What is the exact description of it on the company's books and records?

A. I believe it is written in the books of the company that it is interest on excessive capacity—

Q. Very well.

A. However, that is just a statement on the books of the company, and still the project was not completed and it may just as well have been termed interest during construction.

Q. That is your opinion, but the company's books and records state otherwise?

A. That is correct. There are probably lots of statements on the books of the company that are not definitely the statements that actually refer to particular situations.

Q. All right, isn't it a fact that on Statement 2, as you will note, interest during construction is included in—well, in No. 1013, Main Lines, $1,489,252.13?

A. There is an amount included in some of these charges that is in the job order as interest during construction.

Q. Yes.

A. And there are other job orders included in this main line account where funds were expended and interest during construction does not appear on the company's books.

Q. All right. In this item under Account 1013, Main Lines, the item of $23,232.19 is included as interest during construction?

A. Would you read that figure again, Mr. Reporter?

(The record referred to was read by the reporter, as set forth above.)

The Witness: That is correct. That amount is listed on certain job orders as interest during construction.

Mr. Lange: All right.

Q. Do you know how much of that amount was actually paid out by the company?

A. I believe it was all charged to interest expense of the company.

Q. Were any of the earnings credited back at that time to offset that?

A. I don't know. I didn't go into that.

Q. You didn't go into that?

A. No.

Q. You made no investigation of that phase of it at all?

A. No.

Q. Now, on your Statement 1, construing that statement—

The Trial Examiner: Had he finished with the breakdown of Item No. 1021, Mr. Lange, or were you still on it?

Mr. Lange: Yes, that is right.

Q. Are there any additional items in there that you didn't name?

A. No, the three items I named comprise the total of that account.

Mr. Lange: That is what I thought.

The Trial Examiner: Mr. McCreery, for the convenience of the Examiner, I would like to have the breakdown of this Account 1021 on Statement No. 2 submitted as an exhibit.

Mr. McCreery: What account number?

The Trial Examiner: Account No. 1021, this general construction expenditure. I believe Mr. Willard broke it down to some extent.

Mr. McCreery: You desire that we compile an exhibit?

The Trial Examiner: I would like to have it.

Mr. McCreery: We will so submit an exhibit.

The Trial Examiner: Very well.

I will save Exhibit No. 112 for that exhibit.

Mr. McCreery: Very well.

The Trial Examiner: You may proceed, Mr. Lange.

By Mr. Lange:

Q. Referring to Statement No. 1 on Exhibit No. 114, in the preparation of that statement, why did you ignore the items of Contribution in Aid of Construction?

A. Statement No. 1 includes the cost as reflected on the books of the company for the physical property owned by the company. I didn't take into consideration anything other than the fact that they owned this property; that it was the cost of the property.

Q. Oh, well, you paid no attention to the items that Mr. Davis set up in Exhibit No. 105 as deferred credits, customers advances for construction, $2,982.14, and contributions in aid of construction, $9,193.83?

A. No, sir.

Q. You did not?

A. No sir. The company owns this property and I put it in the cost of that property to the company.

Q. And in connection with the determination of that you didn't give any consideration to these two items?

A. No, sir.

Q. And did you make any segregation as between used and useful property and any other property of the company?

A. I made inquiries as to the used or useful condition of all of the property, and in my opinion the entire amount is used and useful.

Q. How did you arrive at that conclusion?

A. For the mere fact that it is all filled with and delivering gas or has an immediate prospect of delivering gas due to negotiations now in process.

Q. Now, in connection with this exhibit of Mr. Davis', did you hear his testimony?

A. Yes, sir.

Q. And you heard his statement with reference to that item in connection with the International Metals Corporation?

A. Yes, sir.

Q. In the amount of $4,547.11?

A. I don't recall that figure.

The Trial Examiner: You are referring to Exhibit No. 105, Mr. Lange?

Mr. Lange: Yes, sir.

Q. Do you know of that item?

A. I have a recollection of an item of $2,982.14.

Q. What does that represent?

A. Just how it is reflected on Mr. Davis' statement, I can't say, but it is a refundable line extension deposit.

Q. Received from whom?

A. The U. S. Metal Foundation.

Q. You say it is a refundable item?

A. I believe so, however, I would want to contact Mr. Davis on that point.

Q. Then you don't know either way about that?

A. Not that, no.

Q. You gave no consideration to it in the construction of this Statement 1?

A. No, sir. I know that at the present moment that line is not actually delivering gas, however, I also know that negotiations are under way for a prospective early delivery of gas from the line and that the territory is building up for possible service from domestic customers.

Q. Did you hear Mr. Davis testify that it has been over two years since anything definite has occurred with reference to that matter?

A. With reference to changing that amount from one account on the balance sheet to another, yes, I heard him say that.

Q. And if it runs along for another year, then they would probably act? The company would probably act?

A. Mr. Davis would have to answer that question.

Q. Did you in the preparation of your exhibit take into consideration anything that Mr. Davis testified to or presented in his Exhibit No. 105?

A. I only considered the fact that the company owns the physical property and included in my exhibit the cost of that physical property.

Q. And what is that?

A. All of the pipe lines, measuring stations, land, furniture, and other items as set forth in my exhibit.

Q. Now, with reference to this item in connection with

International Metals Corporation, what is the cost of that item to the company?

A. Are you referring to the cost of the line serving that smelter?

Q. Yes.

A. I have a total of $3,114.91.

Q. Does that include the measuring station?

A. I think not.

Q. What is that?

A. I don't have that segregated.

Q. You wouldn't know what that amount is?

A. Not offhand.

Q. Have you inspected that property?

A. No. I saw the building, the measuring station, but I didn't go into it and inspect it.

Q. Have you been out there to see the situation as it actually exists with reference to that line?

A. That building, I am informed, is now being used as a garage of some nature for some department of the base at Fort Logan and negotiations are under way to serve them gas.

Q. The line is not actually in use?

A. To my knowledge it isn't.

Q. It is not, is that right?

A. That is correct.

(Vol. 26, pp. 3587-3617.)

* * * * *

Q. Mr. Willard, on Statement 3, Page 1 of Exhibit 111, Account 1000, "Lands in Fee, Compressor Stations, Sullivan," you have an item of $807.21. What is that item?

A. That is the tract of land located out near the Interstate line near Littleton.

Mr. McCreery: You mean Colorado Interstate Gas Company's line?

The Witness: That's right.

By Mr. Lange:

Q. What is it used for?

A. That land was purchased in connection with the building of a compressor station.

Q. A compressor station which in fact was not located on it, was it?

A. That's right.

Q. Well, what is its used and useful status to the Colorado-Wyoming Gas Company at this time?

A. I believe that that might be considered a proper cost of the Arapahoe compressor station. It was an expenditure in connection with that station that was not finally used but was expended with the idea of location of the station.

Q. Well, why wasn't it used?

A. I don't know that.

Q. The station has in fact been built, hasn't it?

A. It is in the process of being constructed now.

Q. And is located on a different piece of land than this?

A. That is correct.

Q. Then, why is this piece of land used and useful for the Colorado-Wyoming Gas Company's present operations?

A. The company quite often is involved in the expenditure of money in connection with a particular project which is not finally used in that project. I think a typical example would be in the purchase of rights of way. Agents must be sent out in advance to purchase rights of way on a proposed pipe line route, and when the construction comes through, certain hazards or other conditions may change plans that cause them to buy other rights of way. However, I feel that the total cost of all rights of way purchases is a part of the construction cost of the line.

Q. Regardless of whether they are used or not?

A. Very definitely. It is a necessary cost. It is always incurred.

Q. And do you know when this particular piece of land was acquired?

A. No, not exactly, but I would venture an opinion, within the last year.

Q. And when was the other land acquired on which the station is now located?

A. Probably this summer, maybe early spring.

Q. Do you know the exact location with relation to the two tracts of land?

A. By lot, or—

Q. By distance.

A. No, sir, I don't know, but I believe they are probably about ten miles apart.

Q. About ten miles apart?

A. That's just my opinion. I haven't actually looked at them on the map.

Q. Well, then, this Sullivan station land, as you name it, isn't near the other one and has no relation to the other one with reference to use, has it?

A. Oh, no.

Q. Now, you have an item on Page—well, it's not numbered—Statement 3, Page 3, of Exhibit 111, Account 1013, "Main Lines, Miscellaneous—12,848 feet." What is that item?

A. Those are small lines that were built at the same time the main Littleton-Boulder Junction to Boulder line was constructed, probably three or four different lines of small size that were included in that work. I believe I could name them for you if you want them.

Q. Yes.

A. There is 281 feet of 2-inch line to Arvada; 2,381 feet of 2-inch line to Mount Air; 155 feet of 3-inch line to Edgewater; 4,161 feet of 3-inch line to Mount Air, and 5,870 feet of 4-inch line to Edgewater.

Now, those two sizes of pipe in the Mount Air and Edgewater lines are the continuous run to the particular location.

Q. Now, I see on Page 5 of Statement 3, Account 1013, "Main Lines," you have a group of miscellaneous lines?

A. Yes, sir.

Q. What are they and where are they located?

A. Well, there are numerous small lines that total the various feet that you see listed on that page, and I have them tallied here, if you want to know just what they are.

Q. Yes.

A. The line to Coors Brewery is 936 feet of 1-inch; there is also 60 feet of 1½-inch in connection with the same line; and 452 feet of 2-inch in the same line. The Berthoud line consists of 9,337 feet of 2-inch and 5,865 feet of 2½-inch. The line to International Metal Foundry, I think the name of it is, is 3,750 feet of 4-inch. In connection with the Johnstown line there is 485 feet of 2-inch. The Kuner-Empson line is 1,705 feet of 2-inch. The Longmont branch has 2,991 feet of 3-inch. The Loveland branch has 2,829 feet of 4-inch. The Lutheran Sanitarium branch 2,115 feet of 1½-inch. The Marston branch 2,666 feet of 2-inch. The Fort Warren branch 12,353 feet of 3½-inch.

Q. On Page 8 of Statement 3 under Account 1014, "Compressor Stations," you have an item of a scrubber, $1,482.51. What is that equipment and what is it used for?

A. That equipment is at the Wellington compressor station. Its use was for cleaning the gas in connection with the intake of the Wellington field at the original installation, and I believe that is now connected with the line going to Cheyenne. I am not sure of that latter.

Q. Are you sure that it is being used at present?

A. I know it is there.

Q. Is that what it is, a scrubber?

A. Well, it is a scrubber or—I think that is the common name, dust scrubber. I think on the purchase invoice of this item it named it a pulsation eliminator.

Q. And right above that you have an item of an oil tank. Where is that located?

A. That oil tank is in a vertical position—well, it is at the same end of the building where the generator is located? Whether that is east or west, I am not sure.

Q. At Wellington station?

A. Yes, sir.

Q. Is it actually being used?

A. I believe it is, yes.

Q. Did you see it?

A. Yes, I saw it.

Q. Did you ascertain whether or not it is in use?

A. Well, I am quite sure when the station is in use—

Q. I mean the oil tank, this oil tank you have listed.

A. I believe it is in use.

Q. It is?

A. Yes.

Mr. Lange: That is all for the present.

The Trial Examiner: Pardon me a moment, Mr. McCreery. Did you state for the record, Mr. Willard, the cost of that line that runs up to this smelter—what's the name of that? I don't find that cost set forth in your exhibit.

The Witness: No, it is included as a part of those miscellaneous lines that is in that 27,000-dollar figure at the end of the individual lines. I can give you the cost. I think I stated that a short time ago.

The Trial Examiner: I didn't recall that you had. Maybe you did.

The Witness: $3,114.91.

The Trial Examiner: $3,000—

The Witness: $3,114.91.

By Mr. Lange:

Q. Now, is that just the line exclusive of the measuring station?

A. That is correct.

(Vol. 26, pp. 3645-3651.)

* * * * *

Commission Exhibit No. 199 (Appendix this Record).

Gas Plant Accounts (Commission Ex. 199).

Bob Vaught, employed as an accountant by the Federal Power Commission at the Denver Regional Office, under Kenneth L. Smith, "Examiner in Charge of Field Assignments," was assigned to the study involved in Exhibit 199, entitled "Colorado-Wyoming Gas Company, Gas Plant Accounts and Examiner's Adjustments," prepared by the witness.

BOB VAUGHT called as a witness by and on behalf of the Federal Power Commission, having been first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Lange:

Q. Please state your name.

A. Bob Vaught.

The Trial Examiner: How do you spell your last name?

The Witness: V-a-u-g-h-t.

By Mr. Lange:

Q. Mr. Vaught, what is your occupation?

A. Accountant.

Q. Are you presently employed by the Federal Power Commission?

A. I am.

Q. At the Denver regional office?

A. I am.

Q. How long have you been so employed?

A. Since July 1939.

Q. In the capacity of an accountant?

A. That is right.

Q. During your employment with the Federal Power Commission, I will ask you whether you have been assigned to do accounting work in connection with the Colorado-Wyoming Gas Company?

A. I have.

Q. And you did that work relative to the present proceeding?

A. I did.

Q. I will ask you further whether in connection with that assignment you prepared an exhibit—strike that.

I will ask you at this time to read into the record a statement of your qualifications and experience in connection with this character of accounting work and your general accounting experience.

Mr. McCreery: May I ask if you have copies of that statement available?

The Witness: Not on the qualifications.

Mr. Lange: No, not of the qualifications. He just prepared that himself.

Mr. McCreery: No copies are available?

Mr. Lange: No copies are available.

The Witness: "After graduating from high school in 1927, I attended the University of Texas for one and one-half years, from September 1927 to February 1929. The work taken during this year and a half included courses preparatory to entering the University's School of Business.

"From July 1929 to June 1930 I was employed by the Texas Electric Service Company, an Electric Bond and Share property, in its district office at Eastland, Texas. My duties during this period with the Texas Electric Serv-

ice Company consisted principally of consumer's accounting. In June I resigned my position with this company and during the summer of 1930 continued *by* studies at the University of Texas.

"In August 1930, I again accepted a position with the Texas Electric Service Company, this time in its district office at Eagle Pass, Texas, and remained there with the company until May 1937. During this period of approximately seven years with the Texas Electric Service Company at Eagle Pass, my experience covered practically every phase of public utility accounting usually performed in district or branch offices. My duties included, among other things, the preparation of all entries at the close of the accounting period and posting same to the general ledger, preparation of financial statements, and all accounting relating to construction, payroll and the material and supply account.

"In July 1937, I accepted a part-time position in the General Land Office of the State of Texas, and also attended the University of Texas until January 1939. During this time I completed all except ten semester-hours of work toward a bachelor's degree in Business Administration.

"My principal field of study or major subject was accounting. Courses in accounting included advanced accounting principles, audit procedure, cost accounting mergers and consolidations, and municipal accounting. Other courses were required and completed in economics, finance and banking, statistics, and business law. A limited amount of research was required relating to problems of public utility management and regulation. In November 1938 I passed the business law, auditing and accounting theory parts of the examination for certified public accountants in Texas.

"From January 1939 to July 1939 I was with the Texas Unemployment Compensation Commission as field auditor. My duties with the Texas Unemployment Compensation Commission consisted principally of the examination of payrolls to determine contributions due under the unemployment section of the Social Security Act.

"I resigned that position to accept a position with the Federal Power Commission in July 1939. I was immedi-

ately assigned to duty in connection with the investigation of Colorado-Wyoming Gas Company.

"On December 1, 1940 I was transferred to the Commission's Division of Original Cost with headquarters in Washington, D. C."

By Mr. Lange:

Q. Mr. Vaught, in connection with your assignment pertaining to accounting matters on Colorado-Wyoming Gas Company, how long a period of time did you devote to that matter?

A. Oh, from July 1939 until about the middle of January 1940, all of my time was spent on this assignment, then from May 1940 until about October 1940, the fall of 1940, being about twelve months.

Q. During that period of time, did you have occasion to examine the books and records of Colorado-Wyoming Gas Company?

A. I did.

Q. Where was that?

A. In their office in the Continental Oil Building here in Denver.

Q. Denver, Colorado?

A. That is right.

Q. In connection with the examination of those books and records of the Colorado-Wyoming Gas Company, did you prepare an exhibit entitled "Gas Plant Accounts and Examiner's Adjustments"?

A. I did.

Q. Is this the exhibit I now show you?

A. It is.

Mr. Lange: Will the reporter please identify it?

The Trial Examiner: It will be marked for identification as Exhibit No. 199.

(Exhibit 199, Witness Vaught, marked for identification.)

By Mr. Lange:

Q. Mr. Vaught, did you in connection with the preparation of that exhibit No. 199 entitled "Gas Plant Accounts and Examiner's Adjustments," also prepare a written statement explaining it and giving in substance the nature of its contents?

A. I did.

Mr. McCreery: Before reading that, may I suggest this to facilitate the hearing, that we will not interrupt to make objections during any of the reading of the written statement with the understanding that the whole matter will be held for subsequent examination, if that is agreeable to the Examiner.

The Trial Examiner: Very well.

Mr. Lange: That is agreeable.

The Witness: "This report sets forth the investment of Colorado-Wyoming Gas Company in Gas Plant, as of December 31, 1939. By account classification, it shows the cost of that plant per the company's books, a series of adjustments made in journal entry form, and the Gas Plant Investment after the application of the adjusting entries. It also shows components of cost of the several classes of plant.

"The adjusting entries, twenty-four in number, running from No. 200 to No. 223, are given on Pages 1 to 36, inclusive. They are of two kinds: those that reclassify plant by transfers of amounts from one plant account to another, which entries are denoted by the letter 'R' prefixed to the numeral, and those that involve accounts other than plant accounts. The purpose of the entries is to adjust the plant accounts so that they will more nearly reflect the legitimate original cost of Gas Plant devoted to the public service. The explanation given as a part of each entry states the reason and basis for each adjustment.

"Schedule No. 1, which appears on Page 37, follows the journal entries. This tabulation shows by plant accounts grouped according to function, the following: the investment per books, as of December 31, 1939, the total amount of Examiner's debit and credit adjustments, and the investment as adjusted, as of December 31, 1939. These elements are explainable as follows:

"(a) The investment per books is related to the company's primary account numbers and is segregated as accurately as possible into functional groups by the Examiner. It may be noted, however, that for convenience the per books figures include measuring stations in lateral and main lines under Transmission Plant. The Examiner

has reclassified to Distribution Plant the cost of measuring stations property relating directly to the sale of gas.

"(b) The Examiner's adjustments, columns 5 and 6, are the total debits and credits for each plant account taken from a recapitulation of the twenty-four entries shown in Subschedule No. 1-A; the difference between total credit adjustments of $494,014.59 and total debit adjustments of $389,656.24, or $104,358.35, consists of a net debit to income accounts for 1939 and prior of $106,817.43, a debit of $815.76 to Capital Stock Expense and a net credit of $3,274.84 to the Reserve for Depreciation (cf. columns 14 and 15, Subschedule No. 1-A).

"(c) The Plant Investment as adjusted (Schedule No. 1, Column 7) is the amount that is recommended to the Commission for acceptance as the original cost of the company's property.

"Each of the Schedules Nos. 2 to 14, inclusive, with their respective subschedules, supports in detail one of the Gas Plant Accounts appearing on Schedule No. 1. These schedules give the investment per books, the Examiner's adjustments, and the Investment as adjusted, in the same manner that Schedule No. 1 does. Schedules Nos. 3, 4, 6, and 12, representing four plant accounts that comprise about 99 per cent of the Company's Gas Plant Property, per books, are commented upon separately below.

"Schedule No. 3 shows the investment in Main Transmission line divided into four sections, each of which is supported by a subschedule that gives the quantity and cost of pipe in its section, together with labor, overhead, and other construction costs.

"Schedule No. 4 shows the investment in twenty lateral lines, and its twenty subschedules, designated 4-A to 4-T, inclusive, support the investment, line by line, with the detail of quantity and cost of pipe, together with labor, overhead, and other construction costs.

"Schedule No. 6 shows in detail the investment in two compressing stations.

"Schedule No. 12 is a tabulation showing the basis adopted by the company in its computation of Interest on

Excess Capacity,' which it capitalized, and the manner in which that computation was made. This element of 'Interest' capitalized at $79,362.52 by the company has been completely disallowed by the Examiner and is discussed further, below.

"Except for reclassification entries, which consist principally of transfers of amounts from one plant account to another, based in many instances upon information furnished by the Commission's Bureau of Engineering, and which need not be discussed here, the larger and more significant entries which should be pointed out are Entries Nos. 200, 202, 205 and 206.

"Entries Nos. 200, 205, and 206, relate to 'Interest,' which has been capitalized by the company on two bases and consists of the ordinary 'Interest during Construction' and the unusual item of 'Interest on Excess Capacity.' By Entry No. 205, the amount of Interest during Construction capitalized by the company in its Gas Plant Accounts ($23,718.50) is eliminated, and by Entry No. 206 the amount computed by the Examiner to take its place ($14,978.74) is substituted. By Entry No. 200 charges made for 'Interest on Excess Capacity' to Gas Plant during the years 1930, 1931, and 1932, amounting to $79,362.52, were eliminated from Plant by transferring them to Surplus. These charges, made after construction of the company's plant was complete and in operation, were based upon a portion of the cost of property south of Fort Collins, Colorado, whose capacity was in excess of that required to handle the volume of business actually done; they were made at the rate of 6 per cent per annum. The practice of capitalizing Interest on Excess Plant is unusual and, furthermore, was made for a period in which the company's return on its Gas Plant Investment averaged about 13 per cent per annum.

"Entry No. 202, in which Gas Plant Adjustments are charged with $83,886.65 and Reserve for Depreciation and Gas Plant in Service credited with $1,094.08 and $82,792.57, respectively, takes out of the accounts of tangible Gas Plant the amount of fees paid to Henry L. Doherty & Company and Cities Service Company on a 5 per cent basis for engineering services less amounts thereof previously retired. These fees are eliminated from Plant Investment because

it is not clear that they represent the actual cost of services rendered, or, for that matter, that service was ever actually rendered for them. The entry and the data accompanying it, which comprise seven sheets of the report, provide a full explanation of the arrangements with the two Doherty companies."

By Mr. Lange:

Q. Now, Mr. Vaught, referring to your Exhibit 199, I note that the title page bears the approval of Kenneth L. Smith, Examiner in charge of field assignment, and Harold Tomlin, Examiner in charge of regional office, and W. E. Baker, chief accountant. All of the men named are with the Federal Power Commission?

A. They are.

Q. And are presently serving in the capacity as stated in that title page?

A. That is correct.

(Vol. 66, pp. 9510-9520.)

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Q. Mr. Vaught, will you refer to your Entry No. 206 as summarized on Page 38, and the detail as set forth on Page 16 of Exhibit 199?

A. Yes.

Q. To get an idea of this, referring to your detail on Page 18—for instance, the Boulder Junction to Fort Collins item where you have recomputed the interest at $3,695.03—I would like to have you give me the details on just how you worked that item out. If that is in the working papers, if we can have them, that will be satisfactory.

Mr. Lange: Can you supply that from your working papers that are here, Mr. Vaught?

The Witness: Yes.

Mr. McCreery: I want that in complete detail.

Q. Can you explain that now or later?

A. I believe I have it here. I will give you Boulder Junction and Fort Collins.

Mr. Lange: As I understand it, that is the item of $3,695.03 appearing on Page 16, Exhibit 199?

The Witness: That is correct.

Mr. Lange: As I understand it, Mr. McCreery, you want to have made available to you the working papers of Mr. Vaught?

Mr. McCreery: I think it would facilitate the examination at this time if we delay it until we have that data, if it is agreeable with the Examiner?

The Trial Examiner: That is very agreeable.

Mr. McCreery: That would mean any part of them?

Mr. Lange: That would mean any part of them and any part pertaining to this exhibit would be available to you.

Mr. McCreery: For the present we will pass up any reference to that particular entry.

The Trial Examiner: Very well.

By Mr. McCreery:

Q. I passed up Entry No. 204, Mr. Vaught, which is adjustment for cash discounts obtained by Cities Service, $2,844.90 to which you make reference on Pages 12 and 13. It was your idea to eliminate both the 5 per cent and the cash discount in question?

A. Well, this is independent of the 5 per cent.

Q. I understand that, but I asked if they were two independent and accumulative eliminations according to your setup.

A. That is true.

Q. Now, referring to Entry 207 summarized at Page 37 and shown on Page 18, will you explain the occasion for your elimination of that item?

A. Well, this is a reaccounting of these expenses after they were incurred. The company had originally charged the original items to expense and about six months later the amounts were reversed by the company's traveling auditor. The local accounting staff considered the items then applicable to operating expense rather than construction.

Q. In this particular instance you were giving weight to what you say were the entries made by the accounting staff?

A. The local acounting staff.

Q. The local accounting staff of the company?

A. Yes.

Q. You are giving weight to that?

A. Yes, in light of the fact that no evidence was shown that the expense was related to construction.

Q. As a matter of fact, there was no evidence and the accounting officers made no contrary entries with respect to certain of these capital accounts; you gave no weight to the action of the local accounting officers in other cases, and by giving no weight you eliminated the capital account. In this case you gave it weight and by eliminating it it was also eliminated from the capital account?

A. I am not giving weight to the accounting—

Q. You state that you do.

A. In light of the fact that no evidence was shown.

Q. There was no evidence cited in the other case?

A. There was no evidence of the items charged to capital account. If there was evidence they were proper charges to the capital account the entry as made by the traveling auditor had the effect of correcting an accounting of error on the part of the local accounting staff.

Q. As a matter of fact, Mr. Vaught, suppose the local officers had originally put them in the capital account and the traveling auditor put them in the expense account. There wouldn't have been any question in your mind about that, would there?

A. If what?

Q. Supposing these entries had originally been put in the capital account by the local accounting staff and then when the traveling auditor came by shortly after the close of the year he had transferred them to expense. There wouldn't have been any difficulty about that in your mind, would there?

A. If properly chargeable to expense, that would be where they would belong.

Q. But being there was no evidence, you would have let them rest there, wouldn't you?

A. No, I think you would have to have evidence to show they were properly chargeable to capital account, but you can charge them to the expense account.

Q. I have just given you an illustration to which your answer isn't responsive. I stated that supposing this par-

ticular entry had been charged to capital account by the local acounting staff in whom you seem to have some confidence in connection with this particular entry; then the traveling auditor comes by in a few months and says, "No, I want to put that into expense." You wouldn't have questioned for a minute his result, would you?

A. Well, I think he would be exercising a choice there that he would probably be justified in charging to expense.

Q. You would have gone with him?

A. Even though it might be chargeable to capital.

Q. You wouldn't have questioned his determination?

A. If he exercised his choice to charge it to expense rather than capital, I would have.

Q. Why didn't you?

A. Because he charged it to capital. He charged it to the capital account without evidence to show it was properly chargeable to the capital account.

Q. So that is the reason?

A. That is true.

Q. But there is no evidence in either case, is there?

A. Well, sometimes you have to decide these things in the view of lack of evidence rather that what evidence there might be.

Q. What is the evidence?

A. The fact that the evidence there was none.

Q. That is an interesting slant. I appreciate that. As there was no evidence there and it was finally adjusted by the auditing department into the capital account, you disagree there with the final adjustment because there is no evidence?

A. Because there is no evidence—

Q. One way or the other—

A. to show they were properly chargeable to capital account.

Q. Let me ask you this point: Supposing you were making an examination of these books in 1930 and it seemed to be to your advantage from the premise which you were working to make as large a showing on income as possible, that being the thing in your mind under this supposed examination, you are not then under this supposed examination concerned at all with the capital account; you don't care

what the capital account is, but it is in your premise to make as large an income account for the year 1930 as possible. Now, what would be your approach?

A. Let's see what you mean. A person to do that would be more of a manipulator than an accountant.

Q. That might be so, Mr. Vaught. I wasn't trying to characterize, I was just trying to see what the approach would be.

A. The approach would be from the strictly accounting standpoint for such a matter—

Q. As a mater of strict accounting, there is no presumption one way or the other, is there?

A. As to what?

Q. As to which account it belongs.

A. Yes, I think it presumes it belongs to expense.

Q. I mean a general presumption which you are going to use in determining this. In the principle of accounting is there a presumption as to one way or the other whether it is in capital or income account in these cases which may be close to the border line? Is there such a principle of accounting?

A. Yes, after the management or the company itself has exercised the choice they should then go along in the same way and continue to be consistent.

Q. In other words, when the entry has been made, presumably in good faith and so on, the presumption is that is where the entry should be?

A. If it is not an error, yes.

Q. What do you mean "error"?

A. Well, a bookkeeping error.

Q. Well we are not talking about bookkeeping errors. We were talking about, as I assume, principles of accounting. If you put down the figure 5 instead of the figure 6, that would be an error. This isn't a matter of mere technical errors. This is a matter, as I understand you, of what is proper accounting. After the entry is made, is there a presumption under the rules of accounting as you understand them in favor of the entries made, whatever the entry is?

A. If there is no error, yes.

Q. What do you mean by an error?

A. If it is an entry such as this, that is a charge on the books of the company such as this charge here, then the presumption is that it is the correct accounting practice.

Q. Why is it the presumption that it is the correct accounting practice, Mr. Vaught?

A. The company exercises its right to charge an item like you said, a border line case, and they are going along in the same way and are consistent in the handling of such matters.

Q. If that is true, doesn't the same presumption you are talking about operate as to these other items which were in fact entered by the company and which you are now trying to reverse, there being no evidence one way or the other?

A. No, there is no item that can get into your plant account unless properly chargeable to your plant account.

Q. That is a presumption, isn't it? Is this an accounting presumption against putting anything in the plant account?

A. I don't follow you on that question.

Q. Is there a presumption in accounting against putting an item into the property account?

A. I don't believe I understand your question.

Mr. McCreery: Read the question.

(The question referred to was read by the reporter as set forth above.)

The Witness: I don't believe I can answer that.

By Mr. McCreery:

Q. You don't know?

A. I wouldn't say I don't know. I just don't understand the question.

Q. That is a rather strange answer, if you don't understand the question that is one thing, but when you state you won't say you don't know the answer, you do know?

A. The presumption is to charge it to the account that it belongs to.

Q. Is the presumption the item has been charged to account to which it belongs when it was so charged?

A. (Pause).

Q. Is there any presumption in accounting in favor of the entry when made as to whether it is to be property account or income account?

A. If I understand you—yes, if the entry in itself is not in error?

Q. How are you going to prove it is in error in the absence of evidence?

A. The absence of evidence will prove it to be in error, yes.

Q. There is a presumption, but the very absence of evidence proves it is in error, is that it?

A. In an item such as this, I would say yes.

Q. We will come to this item. I am talking about some general ideas you have about accounting right now. Let's get our general picture set and then we will deal with this item further. Will you answer my question in general? I have asked you the principle and theory of accounting, you being a certified public accountant, and I want to know what the picture is as you understand it.

A. As to what?

Q. Just the question I asked you, Mr. Vaught.

A. Read it.

(The question referred to was read by the reporter, as set forth above.)

By Mr. McCreery:

Q. —having already stated there is a presumption in favor of the entry?

A. As to a charge of whether or not it is applicable to either expense or capital, there is no evidence to show that it is applicable to capital, and it follows it must be an expense.

Q. In other words, you say there is no presumption in favor of any entry, is that true?

A. That is probably true.

Q. You just said a few minutes ago there was a presumption in favor of it. Please make up your mind.

A. I misunderstood your question. I probably don't understand yet what you are driving at.

Q. When an entry is made on the books under principles of accounting and in the absence of any evidence other than the entry itself, is there a presumption that that entry was properly made?

A. No, as all entries have to be made—

Mr. Lange: You are limiting your question purely to an accounting standpoint?

Mr. McCreery: Yes.

The Witness: There must be documentary evidence for all entries. There should be.

By Mr. McCreery:

Q. You have your voucher and no other evidence than that, the fact that the money was paid for this particular service or this particular thing and charged to this account, there being no question but what the money was paid; the question being whether having charged that item or voucher to this account in the absence of anything else, there is a presumption that that was a proper charge?

A. The entry will have to be decided along with the information shown by the voucher.

Q. So that your views of the principle of accounting are that in such a case there is no presumption that it was a proper entry?

A. No, there is no presumption here that it is a proper entry.

Q. I didn't ask you about "here," I asked if that is the principles of accounting. You answer my question, please.

A. I have never seen it stated just that way.

Q. Whether you have seen it stated that way or not, please answer my question.

A. Read the question.

(The question referred to was read by the reporter, as set forth above.)

The Witness: "In such a case," which case do you mean?

By Mr. McCreery:

Q. Well, we will have to start over again because I have to find out about this. I am not very well informed on accounting and I thought you were and I thought I could get some information from you. When an entry is made, charged to a certain account—there being no question but that the money was spent for the purpose indicated and that the services or goods were received, the charge is made to a certain account by the accounting officers of the company,

under such circumstances—is there any presumption in the absence of all evidence, either that that was a proper charge or that it was not a proper charge to that account?

A. As to whether or not it was a proper charge to capital or expense can be determined only by the documentary evidence behind the voucher.

Q. Then you say there is no presumption either way, either that it was or was not, is that right?

A. Between capital and expense, I would say the presumption would be it would be expense.

Q. Under what system of accounts is that the presumption?

A. Well, it is—there is your conservative accounting.

Q. As you understand accounting?

A. That is true.

Q. Under what system of accounting do you know that it is the accepted practice? Will you state that, please?

A. Under what system that is the practice?

Q. That you know anything about. I am not interested in a statement. It is proper accounting in general that I am interested in. I want to know the authority upon which you proceed in this manner. I have asked you a general question and it bears no relation to any of these entries that you have made.

A. Conservative accounting is a principle of all systems of accounting.

Q. Which one in particular?

A. Of all, any system.

Q. Produce one.

A. This one here (indicating).

Q. What is "this one here"?

A. The Uniform System of Accounts for natural gas companies.

Q. All right, show us where it is in that system of accounts.

A. I can't show it to you in black and white.

Q. Oh, you can't?

A. No.

Q. It is like a hidden tax?

A. No, that is not true, but in the case of Entry No. 207—

Q. We are not dealing with any entries now. We are dealing with general principles. We can apply the principles

later. We don't build our views of accounting to fit the entries ordinarily. We have our basic principles to start with and that is where we are now.

A. I have applied the principle of conservative accounting—more conservative accounting.

Q. Where do you find that principle stated?

A. It is one of the principles.

Q. That is what I am trying to get at. State the principle, now that we have it down to a principle?

A. A principle for what?

Q. You have just said it was a principle. You should know about the principle you are discussing.

A. The principle for what?

Q. You can answer my question. You have stated in every system of accounts it is the principle involved. Now, what is the principle you say you are relying on, then? You seem to know all about it except when you are asked to answer a question.

A. Read the question.

Q. There is no question. I asked you what the principle is you are talking about.

A. Do you want me to refer you to some text books or what-not?

Q. Well, I just want you to answer the question.

A. I don't know what the question is.

Q. You don't? We'll start all over again, then, Mr. Vaught. In accounting—you are a certified public accountant, are you not?

A. No.

Q. Are you not?

A. No.

Q. But you have studied accounting?

A. Yes.

Q. And you are here as a trained accountant?

A. That is right, yes.

Q. When the accounting officers of a company make an entry charging a certain item to a certain account, there being no question but that the services or goods or whatever was involved in the payment of money were furnished to the company, the only question being is, having charged it to a certain account, there being no other evidence before

you as an accountant at that point, is there any presumption either that it is a proper charge or that it is not a proper charge to the particular account to which it was made? I believe that is an intelligent question.

A. The charge itself—the mechanical part of making the charge, the entry on the books, would not make the presumption that the entry was correct.

Q. All right, would there be a presumption that it was not correct?

A. One way or the other.

Q. No presumption one way or the other?

A. No.

Q. So in the entire absence of presumption, the item stands, then, unless there is disproof—I mean, the charge stands to a particular account, then, unless there is proof to the contrary, is that true?

A. No, I think as between capital and expense there would be a presumption.

Q. There is a presumption. All right, now, then as between capital and expense, where an item has been charged to capital, there being no evidence aside from the fact of the service or the goods furnished and paid for and received, and the charge itself, the presumption would be what? that it should be charged to expense?

A. That it should be charged to expense.

Q. That is your presumption?

A. Yes.

Q. Now what is your authority in accounting for that position?

A. The fact that it is the more conservative accounting to charge the item to expense.

Q. Now, wouldn't it very much depend upon what the purpose of your inquiry was?

A. No, I don't think so.

Q. It wouldn't at all?

A. No.

Q. Now, there wouldn't be other exhibits in this case where the other presumption had been indulged, would there, by the accounting staff of the Commission? Do you know of any?

A. Read that.

(The question referred to was read by the reporter as set forth above.)

The Witness: No.

By Mr. McCreery:

Q. You don't know of any other?

A. No.

Q. And you think that this is a principle of accounting but you don't know where to find it?

A. It is a conservative principle of accounting.

Q. Where is it found?

A. It is just one of your principles of accounting.

Q. Isn't there any place where it is stated, to your knowledge?

A. Yes.

Q. All right, produce some. I want to know about this.

A. May I have a few minutes? I believe I can get it for you.

Q. Do you want to take a little recess, then?

The Trial Examiner: I wonder, Mr. McCreery,—

Mr. McCreery: I can leave that and go on to another subject.

The Witness: All right, I can get it later.

By Mr. McCreery:

Q. Now, in connection with this traveling expense, you have thrown that to expense because there is no evidence on the voucher, is that it?

A. That is right, no evidence to show that the expense is related to construction.

Q. All right. Now, going to your Entry No. 208, why did you throw that to expense?

A. It was an expense relative to securing new business.

Q. It was an expense in the determination of whether a line would be built to Greeley, was it not?

A. That is, in determining whether or not—in securing the town border service at Greeley.

Q. And in that determination, in considering the building of a line, that is not capital but expense, is that your theory?

A. That is right, on this $375, yes.

Q. So that is, in its nature, you feel an expense item?

A. That is true.

Q. Have you ever dealt with that kind of an item before in accounting practice?

A. With items of expense relating to the securing of new business, yes.

Q. Give me an illustration of what you consider analogous to this.

A. I can't say that I know of one offhand.

Q. How's that?

A. I can't say that I know of one offhand.

Q. Is there a difference in your mind between an established operation in which there is expense to acquire new business for the existing business, and a determination of whether a new line will be built? Is there any distinction in your mind between those two cases?

A. In a new company just starting out, there would be.

Q. With respect to a new construction of line?

A. A company that before has not been in operation, yes, that is, not picking out a segment of the line—

Q. Now, let me get this. We are supposing that this Fort Collins-Littleton line which was not then built and was under consideration, together with the extensive line from the neighborhood of Loveland to Greeley, but which was not then built but later built, constituted the entire system of the Colorado-Wyoming Gas Company, that there had been no Fort Collins-Cheyenne portion; then you say the situation would have been different, is that it?

A. No, I say the situation would have been different back in 1925.

Q. Well, we are just going at it in a different way. You mean before there had ever been any gas business at all?

A. That's right.

Q. You don't give any consideration to the fact that the Fort Collins-Cheyenne structure, line and business was at a point of closing because of exhaustion of gas supply, and a brand new picture all the way from Littleton to Fort Collins was entered upon with a completely different setup. That wouldn't alter the case, would it?

A. No.

Q. I see; and the fact that it had under consideration the building of a line from Loveland to Greeley, twenty miles,

and that this related to the determination of that question as a thing that had to be determined before the line was built. That still wouldn't make it a capital account with you?

A. Not in 1930, no.

Q. Why not in 1930?

A. Well, I say, the company was in operation.

Q. I see, just because it was in operation?

A. Well, at that point it wasn't new business. It was expense in regard to securing new business.

Q. New business is the development of volume from existing facilities, ordinarily isn't it? Isn't that new business expense? Isn't that what new business expense ordinarily means?

A Yes, with any additional facilities that might be necessary in order to take care of this new business.

Q. Then under your principle, how can you capitalize at all the line from Loveland to Greeley which is an addition to the line after the main line is built? That is new business.

A. That isn't—that hasn't been my assumption at all.

Q. I am asking you, where are you going to draw the line between what you have said and that picture that I have just suggested to you?

A. Read that.

(The question referred to was read by the reporter as set forth above.)

By Mr. McCreery:

Q. That's new business, that Greeley line. Now, how do you justify the capitalization of that?

A. The line itself?

Q. Yes.

A. No, that is a property addition.

Q. Property addition.

A. That is true.

Q. Now, any expense in connection with that would properly be an addition to plant, wouldn't it?

A. On an item such as this—

Q. Wait a minute, I am speaking generally.

A. Not this item—

Q. Wait a minute, I am speaking generally. Any expense involved in putting that line across there, completing it.

would be an addition to plant, wouldn't it? Your original setup of the line—

A. The expense for the actual construction, yes.

Q. With necessary overheads?

A. That's right.

Q. All right, now, and the preliminary work by which you determine it is justified to build the line is also a capital charge, isn't it?

A. Generally, yes.

Q. Generally, yes. Do you know exactly what this expenditure was involved in Entry 208?

A. I think I do, yes.

Q. State what it was.

A. It was a question of whether the city of Greeley would be furnished with Tex s gas or gas from Berthoud field.

Q. Yes.

A. And I think it was necessary for the company; in other words, Colorado-Wyoming or Public Service Company to show to the City Commission of Greeley that it would be impossible for them to serve Greeley with Berthoud gas. I don't know what the reason was, but it follows probably that the reason had to do with setting a rate, probably.

Q. You don't know that?

A. Well, I'm speaking just general knowledge. I don't know for sure.

Q. You don't know what was included in this report?

A. No.

Q. You didn't see the report?

A. I believe I did see the report. I don't recall.

Q. You knew what was in it?

A. I knew what was in it at the time. I don't recall now.

Q. You don't know now?

A. No.

Q. So whether that was a report on rates or on the availability of gas or whether a line would be built from Berthoud by the people that owned that field or whether Colorado-Wyoming Gas Company could better furnish a supply of gas. Those questions you don't know whether they were involved in this report and in this demonstration, do you?

A. I don't recall all the details.

Q. What detail do you recall?

A. I do know that the determination on this entry was made in view of the facts at hand and it was determined that this was not a proper charge to—

Q. What are the facts? Have you got them?

A. The fact that it was a new business expenditure and should be charged to new business.

Q. That is a conclusion, Mr. Vaught. Now, what were the facts upon which you determined this was purely a new business expense?

Mr. Lange: Are there any items in your working papers that might be indicative?

The Witness: I think there is more information, yes.

By Mr. McCreery:

Q. Will you produce that after lunch, Mr. Vaught?

Mr. Lange: Will you make a note of that so you can check it?

The Witness: Yes.

By Mr. McCreery:

Q. Now, Mr. Vaught, your entry No. 210, what are the items involved in that item 210?

A. The items making up the $119.36?

Q. Yes.

A. $40.16 of it represents expense for general books.

Q. Now, setting up the books at the outset is not a proper organization expense?

A. Not your operating ledger; that is, ledgers used for—

Q. The office expense incident to organizing the activities is not an organization expense?

A. The what?

Q. Is that not an organization expense?

A. Read that.

(The question referred to was read by the reporter as set forth above.)

The Witness: The office expense in the organization of the company, yes, that is organization expense.

By Mr. McCreery:

Q. And this you say is not organization?
A. No.
Q. Under what authority do you say that?
A. Well, the nature of the charge itself.
Q. It is your conclusion?
A. Well, it is the only conclusion that can be made.
Q. What authority have you got?
A. I can give you the authority on that.
Q. All right, I'll be glad to have it. Now, the next item is what?
A. $79.20.
Q. That is what?
A. Filing fees on corporate property located in Colorado for the year 1931.
Q. Those filing fees are fees required to be paid by every corporation that starts to do business, are they not?
A. Yes.
Q. On an enlarged capital. Do you remember what these fees were?
A. Yes, they were on enlarged—that is, on the enlarged capital employed in Colorado.
Q. It was obviously necessary to have an enlarged capital in connection with the substantial expenditures involved in building the system from Fort Collins to Littleton, was it not?
A. That is true, yes.
Q. Were the original filing fees of the original capital proper organization expenses?
A. Not in 1931, no.
Q. Well, were they in 1925?
A. That might be questionable.
Q. It might be questionable. Now, do you know which it is?
A. Well, these filing fees were not paid until after—I will have to check this voucher 2833. I can do it now or later?
Q. You are checking which now?
A. Sir?
Q. Which were you checking?
A. I would like to check the working papers on this voucher 2833.

The Trial Examiner: Do you have them right there, Mr. Vaught?

The Witness: Well, these were paid in February 1931, and charged to the Littleton-Boulder line, which had gone into service in 1929.

By Mr. McCreery:

Q. Now, what was the charge? What was it in payment of, Mr. Vaught?

A. Corporate capital employed in Colorado for the year 1931, $264,000.

Q. Because of the enlarged capital of the company, was it not?

A. That is true.

Q. That's right, occasioned by the expenditures in these lines.

A. That is right.

Q. All right. Now referring to your Entry 211—

Mr. Lange: I might ask right there, Mr. McCreery, that item included the old as well as the enlarged capital, did it not? Included the whole? That is, the tax you are speaking of there? What did that cover? What do your work sheets show that that covered?

The Witness: It covered additional capital of $264,000.

By Mr. McCreery:

Q. It was just an additional item as I understand. If it is not it is subject to correction, of course.

A. That is true, additional property employed.

Mr. McCreery: It was the additional property employed.

Mr. Lange: In the year 1929.

Mr. McCreery: It was payable after the event, but it was paid because of the embarking of additional capital, in the enterprise.

Mr. Lange: All right. Pardon me for interrupting.

Mr. McCreery: I think we have a common understanding there. If there is any correction there, of course, it can be made.

Q. Now, referring to your Entry No. 211, Mr. Vaught, Pages 38 and 21, will you explain why—are those items taken out of the capital account?

A. That is true. $202 is charged to operating expense for the year 1926; $815.76 is charged to capital stock expense.

Q. So they are both taken out of your capital account under your figure?

A. They are removed from the plant account.

Q. What are those items?

A. The first item, director's fees, covers director's meeting as of December 19, 1925.

Q. What was involved at that time? Was that the organization meeting of the company?

A. No, the organization meeting, I believe, was held around the first of December.

Q. What was the purpose of this meeting? to complete organization and qualify the corporation for business?

A. I believe we have the minutes on that. The first meeting of the incorporators and subscribers to the capital stock was held December 1, 1925.

Q. When was the second meeting held?

A. The second meeting was held December 18, 1925, I believe.

Q. And when was the third meeting held?

A. The third meeting was held February 27. The December 19 meeting there is probably the meeting held on December 18.

Q. There wasn't any meeting on the 19th, was there?

A. No, there doesn't seem to be. That was probably shown by the voucher itself.

Q. Now, what was this $200 in payment for?

A. Fees of the directors for their meeting held December 18, 1925.

Q. One meeting or two meetings?

A. Two meetings were held.

Q. The original meeting was an organization meeting and the subsequent meeting was also an organization meeting?

A. There were two meetings held on December 18.

Q. I will ask you this without having you read the minutes—this will shorten the record unless it is desired to read the minufes—was all of the business transacted at those meetings purely organization business?

A. No.

Q. What was it, then?

A. At the first meeting held December 18, 1925 the by-laws were approved. Any two officers could sign checks, notes, and so forth. That was the business carried on at the first meeting, December 18, 1925.

Q. And the second meeting?

A. The second meeting of December 18, 1925, at it a resolution was adopted accepting the offer of H. O. Caster dated December 18, 1925; officers were authorized to issue 4,990 shares of capital stock therewith which should be deemed fully paid and not liable for any further assessment. Our officers were authorized to pay to or upon the order of H. O. Caster $76,800.

Q. That was all the business transacted?

A. That was all the business transacted.

Q. Were there any director's fees paid for the first meeting in December?

A. I would have to check that to be sure—I don't believe there were.

Q. So these are the only executive fees paid in connection with the organization of that company as far as your records show or subject to any correction you want to make?

A. Subject to check, I would say yes.

Q. You have given in substance all that was transacted in those two meetings?

A. That is correct. The only thing would be the offer made by H. O. Caster, which was accepted—

Q. By which the company organized itself and started in business?

A. This was relative to a contract between the Fort Collins Producing Company and Colorado-Wyoming Gas Company.

Q. Which is already in evidence?

A. I believe it is.

Q. What was done at the meeting in December? Was that an organization meeting, too, the first meeting?

A. The meeting on December 1?

Q. Yes.

A. The subscription agreement to the capital stock was drawn up.

Q. Were officers elected and given authority to prepare bylaws and those things?

A. That is true, yes.

Q. So the activity of the meeting was strictly organizational?

A. That is correct.

Q. Now, your next item, fee for filing annual report, is that the report of the organization of the company?

A. That was all the information shown on the voucher itself.

Q. The next item is tax stamp, $50.76. What is that?

A. That is the stamp necessary for the transfer of capital stock.

Q. Transfer or original issue?

A. Yes, that is true.

Q. It was for the original issue, is that right?

A. Whether this is stamps for the original issue, I don't know.

Q. You don't know?

A. No, the information doesn't show on the voucher. It might be—

Q. You don't follow that?

A. Probably I can check on that and be positive.

Mr. McCreery: I would like to put it in subject to correction that it was the original issue and if there is any correction you can make it.

Mr. Lange: Very well.

The Witness: How much those items—that is right.

Mr. Lange: However, I don't know that there is sufficient information available for Mr. Vaught to check it. He may not have it in his working papers.

Mr. McCreery: He can come over and look at the stock book.

The Witness: It is the original issue because it is transferred to the capital stock expense.

By Mr. McCreery:

Q. The original issue?

A. That is correct.

Q. What is the item of tax on capital stock?

A. It is tax on the original stock.

Q. Let's go to the next item dated June 28, 1932 entitled "Organizational Issue, Documentary Stamp, $750."

A. That speaks for itself as to what it is.

Q. Does that cover the enlarged capital occasioned by the increased plant of the company?

A. That is the documentary stamp tax on the original issue.

Q. At the time of the capitalization of the line expense from Fort Collins to Littleton, is that what it covers?

A. No, I don't—

Q. You don't know?

A. No, it covers the—

Q. You have it charged to capital stock expense.

A. That is true.

Q. Do you want to check that?

A. Yes, because I know I have information in my working papers on that.

Mr. Lange: I believe I might ask Mr. Vaught a question at that point.

When you speak of "original issue," that refers to this increase in capital stock, doesn't it, not going back to the original stock?

The Witness: Yes, sir.

Mr. McCreery: That is right, but it is the original of the increase as distinguished from the original issue of 1926.

The Trial Examiner: Do you want to check your working papers?

The Witness: I can.

Mr. McCreery: It is clear as far as I am concerned.

The Witness: That is why you were trying to make something out of it—

Mr. McCreery: I think we have a common understanding.

The Witness: That is why I wanted to check on it.

By Mr. McCreery:

Q. Where did you eliminate those as not part of the organizational expense?

A. This merely transfers it to the capital stock expense.

Q. But it went out of the plant account?

A. It went out of the plant account.

Q. Why did you put them out of the plant account?

A. Because under the Uniform System of Accounts they belong under capital stock expense.

Q. And it should be taken out of the plant account?

A. Yes, and set out separately on your balance sheet.

Q. But out of the plant account?

A. Out of the gas plant account, yes.

Q. Are they still in your rate base?

A. I don't know. I wouldn't say. I mean—

Q. These entries were made long prior to the Uniform System of Accounts, Page 54, Item 301, Organization.

The Trial Examiner: What is your question, Mr. McCreery?

Mr. McCreery: The Uniform System of Accounts, to which he is referring, under Gas Plant Accounts, Intangible Plant, states:

"301. Organization.

"This account shall include all fees paid to Federal or State governments for the privilege of incorporation and expenditures incident to organizing the corporation, partnership, or other enterprises and putting it into readiness to do business.

"Items

"1. Cost of obtaining certificates authorizing an enterprise to engage in the public utility business.

"2. Fees and expenses for incorporation.

"3. Fees and expenses for mergers or consolidations.

"4. Office expenses incident to organizing the utility.

"5. Stock and minute books and corporate seal."

Of course, these items were entered long prior to the passage of the Act or the promulgation of the system of accounts, but since the witness referred to it, I wanted to

call his particular attention to that in connection with his statement.

The Witness: But the system does provide for the capital stock expense to be set out in a separate account.

By Mr. McCreery:

Q. Where is that?
A. Page 25.
Q. Page 25?
A. Page 25 of the Uniform System of Accounts.

"151. Capital Stock Expense.

"A. This account shall include all commissions and expenses incurred in connection with the original issuance and sale of capital stock, including additional capital stock of a certain class of series as well as first issues."

Q. Go ahead.
A. It says:

"B. When any issue of capital stock, or portion thereof, has been retired, there shall be credited to this account the balance herein in respect to such retired stock. (See Balance sheet instruction 5.)

"C. The utility may amortize the balance carried in this account by charges to Account 414, Miscellaneous Debits to Surplus."

Mr. Lange: Which is the section applicable in your opinion?

The Witness: Yes.

By Mr. McCreery:

Q. That is Section A, Account 151, Page 25?
A. Yes.
Q. You claim that gives you authority at this time to take out of the capital account these items of this type entered long before the establishment of the Uniform System of Accounts, and notwithstanding the gas plant account set up on Page 54, is that your construction of all this?
A. Those items are not items of organization expense.
Q. In other words, you claim they are not organization expense?

A. That is true.

Q. And the whole extent of your authority for that claim is Page 25, Section 154-A? Is that it?

A. I think that is sufficient.

Q. Is that what you are reading now?

A. Yes.

The Trial Examiner: The hearing will stand in recess until 2:00 o'clock this afternoon.

(Whereupon, at 12:40 o'clock, p. m., a recess was taken until 2:00 o'clock, p. m., of the same day.)

Afternoon Session, 2:00 P. M.

The Trial Examiner: The hearing will be in order.

Whereupon Bob Vaught, the witness on the stand at the time of recess, having been previously duly sworn, resumed the stand and testified further as follows:

Cross Examination (Continued).

By Mr. McCreery:

Q. Mr. Vaught, referring again to Exhibit No. 199, Page 16, with respect to the computation of interest as you have there made it, interest during construction, referring to the second item entitled "Boulder Junction to Cheyenne," during month of first construction charge and date of initial service or operation and the note wherein you recompute the interest at $3,695.03, would you tell me just how that computation was made?

A. The monthly charges were set up beginning with the month of April as the month in which the first charge was made, April 1929, and taking the monthly charges therefrom, from April through November, and eliminating the Examiner's adjustments, arriving at an adjusted monthly expenditure upon which to base the rate; that is, upon which to figure the interest, and then apply the monthly interest rate to arrive at the amount of interest applicable to it, and the Boulder Junction to Fort Collins line, the construction on it was broken down in two parts which were the expenditures to the date of service to the Great Western Sugar Company, interest being figured on the charges by months to that date. Subsequent to that date the line was extended on from the Greeley Junction to Fort Collins.

Q. Was the line built subsequent to that date or put in service subsequently to that date?

A. It would probably be better to say subsequent to the date it was put into service.

Q. With reference to your interest computation, as I understand the figures, your have allowed interest to November 30, 1929 on the entire line to Fort Collins from Boulder Junction?

A. That is true, yes, sir.

Q. Then from November 30, 1929 to the end of January 1930 when the gas was first served through the Fort Collins line, there was no interest allowed between those two dates on that part of the line extending from Greeley Junction to Fort Collins in the way that you computed it, is that not a fact?

A. You say there was no interest allowed?

Q. From November 30, 1929 to January 31, 1930 on that part of the Boulder Junction to Fort Collins line from Greeley Junction north to Fort Collins.

A. Interest was allowed only on the additional expenditures.

Q. But not on the previous construction?

A. That is true.

Q. Now, you got a figure of total interest without subsequent expenditures of about $3,800 on that line?

A. That is correct.

Q. Now, under your theory of computation I take it that because you hadn't any breakdown in the cost of the Boulder to Fort Collins line segregated down to the Greeley Junction to Fort Collins line to the north and the Greeley Junction to Boulder line on the south you weren't able to make that computation, were you?

A. That is right, because we couldn't break it down between those two points.

Q. Now, assuming, Mr. Vaught, that you had given—strike that.

Assuming that you had available to you the construction cost prior to November 30, 1929 of the line from Greeley Junction north to Fort Collins; you could then and that would be in conformity with your tabulation and set up there, have figured the interest which should have been allowable on that part of the line during the interval from November 30 to January 31, is that right?

A. That is true.

Q. Assuming on an allocation of cost which is subject to the check of the Commission's staff, the cost to November 30, 1929, of the Greeley-Fort Collins section, that is, the Greeley Junction to Fort Collins section was $116,577.80. An interest computation for the month of November and January would amount to $1165.77, would it not, at a six per cent rate?

A. It would be approximately 60 days' interest on that amount of $116,577.80.

Q. If these figures that I have supposed are correct; that would be a proper correction to make in your computation, wouldn't it?

A. I think so, yes.

Mr. McCreery: Mr. Examiner, there were certain entries made by the Commission's staff in connection with this exhibit concerning which we had some discussion during the noon recess. We feel that we can facilitate the presentation of it by further going into the working papers, so with respect to a portion here—I suppose it isn't necessary to read it into the record—there are certain entries we are going to have checked over between the Commission's engineers and accountants and our own engineers and accountants which we believe will facilitate it, so that part of the examination we would like to defer until after a further conference has been had.

The Trial Examiner: Very well, Mr. McCreery.

Mr. Lange: That is entirely agreeable.

By Mr. McCreery:

Q. Referring to Page 39, Exhibit 199, you have transferred to Gas Plant Account Held for Future Use the facilities to serve the International Metal Foundation in the amount of $4,430 under your Entry No. 212. On what basis did you make that transfer, Mr. Vaught?

A. The amount shown by the entry is the same figure that appears on the books of the company, and the purpose of this entry is to transfer facilities for serving International Metal Foundation to Gas Plant Held for future use which is in accordance with the Commission's Uniform System of Accounts, Page 16, instruction under 100.4, "Gas Plant Held for Future Use," which states:

"A. This account shall include the original cost of property owned and held for use in gas service under a definite plan for such use. There shall be included herein property acquired but never used by the utility in gas service, but held for such service in the future under a definite plan, and property previously used by the utility in gas service, but retired from such service and held pending its reuse in the future, under a definite plan, in gas service. This includes land and land rights held to insure a future supply of natural gas."

Q. Do you happen to know whether or not there are at this time negotiations for immediate use of this line?

A. No, I only know that there have been negotiations—

Q. You knew negotiations were going on?

A. That is true.

Q. And that is all you know? You have made no further inquiries?

A. That is all.

Mr. McCreery: If the Examiner pleases, subject to the checking of the working papers heretofore indicated, we would like now to discontinue further examination on this exhibit if that is agreeable.

The Witness: I believe, Mr. McCreery, you asked me for a letter this morning in regard to a request made to the company.

Mr. McCreery: Yes, that is right.

The Witness: I can probably read it into the record.

Mr. McCreery: May I see it first?

The Witness: Yes.

(Conference between counsel.)

Mr. McCreery: This is in relation to the inquiry made?

The Witness: You asked if I made a request in regard to the five per cent engineering fee.

Mr. McCreery: This is it?

The Witness: Yes.

Mr. McCreery: I will stipulate that that may be typed

in the record without reading it, if it is agreeable with counsel.

The Trial Examiner: Is that agreeable, Mr. Lange?

Mr. Lange: Yes.

Mr. McCreery: It was just to show that he made a request for certain items as of the date indicated, making the request to the company.

Without reading it into the record it can be copied in by the reporter.

Mr. Lange: I think that would be the best way to handle it, to have it copied into the record. It will speak for itself.

Mr. McCreery: The letter is without the detailed schedule attached to it?

Mr. Lange: Yes.

Mr. McCreery: Then it will be copied in without the schedule.

The Trial Examiner: Very well.

(At the direction of the Trial Examiner, the following letter was copied into the record:)

"August 31, 1939

"Colorado-Wyoming Gas Company, 407 Continental Oil Building, Denver, Colorado.

"Attention: Mr. H. P. Davis, Secretary.

"Gentlemen: In connection with the examination of the plant account of your company as of December 31, 1938, it has been noted that your records do not include information showing the actual legitimate cost of certain capitalized intercompany charges.

"For the purpose of reference the charges in question have been summarized in detail on Schedules Nos. 1 and 2, respectively, attached. Schedule No. 1 shows charges billed by Henry L. Doherty & Company and Cities Services Company totaling $114,180.13, and Schedule No. 2 shows those billed by Public Service Company of Colorado totaling $12,065.15.

"The supporting evidence heretofore available for examination in connection with the items listed will not permit release of the report of the Division of Accounts without an appropriate qualification in respect to the items in question. It is assumed, however, that the company may desire, if feasible, to produce further evidence in substantiation of the legitimate cost of these charges, and if such evidence is made available it will be given due consideration.

"Very truly yours,
"KENNETH L. SMITH (Signed),
Examiner of Accounts."

"Enclosures.

Mr. Lange: I might ask the witness at this time if he has any statement to make with reference to that inquiry.

The Witness: It might be pointed out that the company did not furnish us with additional information in order that we might verify as a proper charge that amount of approximately *to* $126,000, of which $83,886.65 was the five per cent engineering fee. The balance of the amount covers miscellaneous services of Mr. Burnham, Mr. Bussard and Mr. Shortess and other miscellaneous items, both payroll and other expense, and no information was ever received as to the correctness of the charges; however, the five per cent engineering fee is the only amount that we have disallowed.

Mr. Lange: These were all New York charges?

The Witness: They were all New York charges and charges coming from the Public Service Company of Colorado.

Mr. Lange: So as I understand it, although there are other items you inquired about and concerning which you did not receive information, you disallowed only the one item?

The Witness: That is right, the only item that was disallowed. In other words, on Page 84 of the exhibit is an amount which shows to be payroll items charged by Henry L. Doherty & Company. That was the only information shown by the voucher, however, we did not disallow this amount even though the information made available to us was not sufficient.

Mr. Lange: Is that Page 84, Exhibit 199?

The Witness: Payroll items by Henry L. Doherty & Company, $1152.

Mr. Lange: In other words, that was one item upon which you had not received the information that you inquired about but you still did not disallow it?

The Witness: That is right. Most of the items we discussed with Mr. Davis and Mr. Shortess and arrived at a satisfactory solution; that is, the company did not give us the information in regard to these items but we did discuss them with the company officials.

Mr. McCreery: Have you covered all of those items with the company officials aside from the five per cent engineering fee?

The Witness: That is true.

Mr. McCreery: Did you discuss the five per cent engineering fee with the company officials as to what character of service was rendered in connection with that five per cent engineering charge?

The Witness: I believe we did, yes. Mr. Davis told us that at this late date it would probably be impossible for him to furnish from the New York records the details of these charges.

(Vol. 66, pp. 9555-9604.)

* * * * *

Q. Refer to page 38 of your exhibit. I notice Entry No. 200 refers to elimination of interest on excess capacity.

A. That is right.

Q. In considering that column, did you consider at the time that in the years 1928 and 1929 and 1930 the available gas supply of the Colorado-Wyoming Gas Company as it was then derived from the Wellington field of the Continental Oil Company was in process of rapid exhaustion?

A. No, I didn't investigate that.

Q. You didn't consider that?

A. No.

Q. Did you consider the fact that there had been developed in the Colorado-Wyoming system as it existed prior

to the construction of the line from Fort Collins to Littleton a demand of approximately a million, six hundred thousand Mcf. annually?

A. No.

Q. You gave no thought to that?

A. No.

Q. Did you know that there had been and was actually developed a load and service aggregating that or substantially that amount in Fort Collins and in the Cheyenne area?

A. No.

Q. You did not have that in mind?

A. I didn't consider it.

Q. Did you have in mind the occasion for construction of the line from Fort Collins to Littleton to connect with the Colorado Interstate line at that point? Do you know why it was done?

A. Yes.

Q. Why was that?

A. It was to deliver Texas gas north to Fort Collins.

Q. And why was it necessary to deliver the Texas gas to Fort Collins and the Cheyenne area?

A. My understanding was that it was caused by the depleted conditions of the Wellington field.

Q. The Wellington field was rapidly depleting?

A. That is right.

Mr. McCreery: These are non-controversial facts. I am not trying to enter into an engineering phase with this witness.

Mr. Lange: The witness of his own knowledge doesn't know of any of the conditions obtaining in the Wellington area or in the field?

Mr. McCreery: That is right. I am not trying to get into a technical discussion. I am asking him if he has these facts under consideration in connection with this particular account.

Mr. Lange: As to whether there is any controversy about it, the record will speak for itself.

Mr. McCreery: That is right.

Q. Did you have in mind that as between the years 1929

and 1930 and again as between the years 1930 and 1931 the very substantial decrease from year to year in those two years of the supply of gas from the Wellington field? Was that in your mind in considering this?

A. No, it wasn't.

Q. You did not have in mind that there was a construction from Fort Collins to Littleton directly to take care of that load which I have stated was approximately 1,600,000 Mcf. annually?

A. Read the question, please.

(The question referred to was read by the reporter as set forth above.)

The Witness: No, I did not.

By Mr. McCreery:

Q. Do you know whether as a matter of fact that the supply of gas from the Wellington field rapidly depleted in those years and the new line from Fort Collins to Littleton was put into service to take up the difference between the dwindling supply and the existing demand in the Fort Collins and Cheyenne Area?

A. That would necessarily follow.

Q. Did you have it in mind in your consideration of this account?

A. No, I did not.

Q. I notice on Page 4 you refer to the interest on excess capacity; on Page 3 is an unusual item, and then on Page 4 you make this statement:

"These charges, made after construction of the company's plant was complete and in operation, were based upon a portion of the cost of property south of Fort Collins, Colorado, whose capacity was in excess of that required to handle the volume of business actually done;"

You referred in that statement to the subsequent development of load in the territory of Loveland, Longmont, Boulder, and the territory between Fort Collins and Littleton, did you not?

A. Well, I am referring to the—that is the basis upon which the company made the—

Q. I am asking what you referred to, Mr. Vaught.

A. Here?

Q. Yes. Was that what you had in mind?

A. I was referring to the basis—

Q. I am asking you what you meant by that statement.

A. That the plant was complete and in operation.

Q. But the volume of business you are talking about, to what were you referring?

A. I was referring to the company's basis upon which they capitalized this interest, that is, it was their determination that it was an excess.

Q. I am asking you what your determination was, because you have undertaken to reverse the account and I am asking you what determination was made on your part, Mr. Vaught. It is obvious you were not following what the company determines it will be so I am asking you what your determination and basis was.

A. I don't think I follow your question very well.

Q. Perhaps it isn't very clear.

The Fort Collins-Cheyenne load in the approximate amount I have given, which is for the purpose of this question, was not a load to be developed but was at that time an existing load?

A. It was, yes.

Q. And is it not true that at this particular time what had been the original system of the Colorado-Wyoming Gas Company was completely changed and what was in effect a brand new system constructed and placed in operation on the completion of the connection with Colorado Interstate Gas Company at Littleton and the connection at Fort Collins with the old system on the north?

A. Well, it was a development, yes. I wouldn't say it was entirely a new system.

Q. It was fundamentally different, was it not?

A. It was, yes.

Q. Did those matters enter into any consideration on your part in considering this account No. 200?

A. No.

Mr. Lange: You mean Entry No. 200, do you not?

Mr. McCreery: Entry No. 200. It should read Entry 200, Exhibit 199, Page 38.

Q. Referring to Entry No. 201, will you explain why that elimination was made, entitled "Elimination of Arbitrary Percentages of 1929 and 1930, General Expenses"?

Mr. Lange: Mr. McCreery, are you referring to Page 3, Exhibit 199?

Mr. McCreery: I am again referring to Page 38, the summary page, Entry No. 201. If he wants to refer to Page 3, that is quite all right because that is the detail. I have taken the summary sheet to start with.

The Witness: You have asked me the reason why?

By Mr. McCreery:

Q. Yes.

A. On Page 2 of the exhibit the reason is set forth as to the elimination of arbitrary percentages for 1929 and '30.

Q. Upon what evidence did you determine that the items were arbitrary?

A. Page 3 shows in 1930 after the 1929 expenses had been charged on the books of the company the auditors for Henry L. Doherty & Company recommended 25 per cent of certain expenses and salaries of administrative officers be charged to the capital account. It is arbitrary—

Q. Where is the evidence on that?

A. Page 3 of the exhibit.

Q. Page 3 doesn't state just what you have stated, Mr. Vaught.

A. It shows that the percentages used were arbitrarily set at 25 per cent.

Q. Let me a[illegible] you this: Would any method of allocation on a percentage basis be arbitrary to your own mind?

A. No, not any percentage, no.

Q. Will you explain why this is arbitrary?

A. Well, the company had no experience on which to base—we didn't have any evidence where they had made a study to determine—

Q. Did you make any inquiry of the company or any of the officials upon what basis this determination was made?

A. No.

Q. You made no inquiry at all?

A. I probably discussed it with Mr. Davis.

Q. Did you or didn't you, Mr. Vaught? I just want to get the background for this.

A. No, we were able to determine it was arbitrary percentage.

Q. You were?

A. That is right.

Q. Why was it arbitrary?

A. The year 1930 might well show that it was in that the percentages for that year the company estimated 25 per cent of it should be capitalized and their estimate ran as high as 870 per cent; that is, the actual over the estimate. There was a variation there of 25 per cent and as to this 870 per cent—

Q. What was the 870 per cent?

A. It is shown under the year 1930, Page 3.

Mr. Lange: It was general traveling expenses?

The Witness: The fourth item, the year 1930. They estimated a general traveling expense for the year amounting to $1500; it actually amounted to only $25.80.

By Mr. McCreery:

Q. What does that prove?

A. Well, it proves that they were a little off on their estimate.

Q. The estimate being made in advance?

A. That is true.

Q. Let's start with 1929 and find out why that is arbitrary, then we will go to 1930. Let's eliminate entirely 1930 and get back to 1929. You have thrown out, as I understand it, the $2519.74 for the year 1929. Will you state to me why that was an arbitrary amount to capitalize on any evidence you have before you?

A. It was the lack of evidence on the company's books that showed it was arbitrary.

Q. You are aware of the fact, Mr. Vaught, that the burden in a rate case is upon you to establish as arbitrary any company entry and that the presumption as declared by your own Commission is that until the contrary is shown all of the entries will be considered as fair and reasonable?

Mr. Lange: I object to that, Mr. Examiner. That is purely a legal conclusion. First of all, it is unfair to ask this witness, and it wouldn't be proper to ask him what that presumption would be.

The Trial Examiner: Objection sustained.

Mr. McCreery: Before it is sustained, Mr. Examiner, may I suggest that this exhibit and the statement are both founded in legal determinations and that seems to be involved in all of these auditing exhibits. In other words, there has to be a basis upon which he proceeds. He had just stated he proceeded on this basis because there was no evidence in this particular voucher to satisfy him in the absence of evidence and in the absence of inquiry he has thrown the matter out. That must be on some kind of an assumption that is it up to the company in a case of this kind to make proof of anything that any Examiner may determine he wants to question.

The Trial Examiner: That matter, however, Mr. McCreery, is a matter that is to be determined by the Commission itself.

Mr. McCreery: I appreciate that, Mr. Examiner, but I am trying to find the basis upon which this item is made as it is in this exhibit. I have no doubt that before we get through we will be discussing principles of accounting from the exhibits already offered in this case, so it doesn't appear to me that they can be dis-associated from certain fundamental bases of procedure and I think that is involved here.

The Trial Examiner: I think, however, the ruling of the Examiner will stand.

Mr. McCreery: I will save an exception.

The Trial Examiner: Very well.

By Mr. McCreery:

Q. Did you have any evidence of any kind that this allocation in 1929 was arbitrary?

A. Well, I think the information shown here on Page 3 of the exhibit shows it to be arbitrary.

Q. It shows by the statement of the 1929 capitalization it was arbitrary?

A. I think it does.

Q. That is all the evidence you have, if that is evidence?

A. There was no evidence as to whether or not these expenses were applicable—

Q. You made no inquiry with respect to that?

A. As to whether or not they were applicable?

Q. Yes.

A. Oh, we made inquiry in that we tried from the records of the company to determine whether or not—through time tickets—

Q. I asked if you made—

Mr. Lange: Did he finish his statement?

Mr. McCreery: Pardon me.

The Witness: —as to whether we made any specific inquiry, I can't say that we did.

Mr. Lange: May I be permitted to ask a question?

Mr. McCreery: Yes.

Mr. Lange: Did you make any inquiry, or any of the staff make inquiry, with reference to supporting time records?

The Witness: Yes, we did that.

Mr. Lange: What information, if any, were you given, or what reply was made to you?

The Witness: They had no time tickets.

Mr. Lange: They said they had none?

The Witness: They had none.

Mr. Lange: And that was in reply to your request?

The Witness: That is correct.

Mr. Lange: When you referred to time tickets, you referred to those items on Page 3, Exhibit 199?

The Witness: Those items that would come under the payroll charges.

By Mr. McCreery:

Q. Did you make inquiry as to whether there were time sheets kept with respect to the Vice President and General Manager?

A. That is true, yes, sir.

Q. Did you make inquiry with respect to the Secretaries, Clerks, and Stenographers?

A. Yes.

Q. And of whom did you make those inquiries?

A. I don't recall at this time. It was probably Mr. Hurdle or Mr. Davis.

Q. Can you recall?

A. As to being specific, I don't believe I can.

Q. And did you make inquiry as to whether the legal fee of $100 by whoever charged reflected a proportion or not?

A. Well, the company had no information on any of this item.

Q. I asked you if you made inquiry on this, Mr. Vaught.

A. Yes.

Q. Of whom?

A. Probably either of Mr. Davis or Mr. Hurdle.

Q. You made no inquiry of the lawyer who furnished the services?

A. No, sir.

Q. Now, did you make any inquiry about these general traveling expenses?

A. We examined the voucher and the voucher did not show that they were applicable.

Q. That was the end of your inquiry in that respect?

A. That is correct. That is the nature of the inquiry on all of these items.

Q. Did you make inquiry with respect to the office supplies? Of course, obviously, you wouldn't seek time sheets there.

A. That is correct.

Q. Did you make inquiry or just examine the vouchers?

A. Examined the vouchers.

Q. That's all. With respect to the general office rent your examination was limited to observation of the vouchers?

A. That is correct.

Q. Did you consider whether or not the executives of the company may have considered carefully what was a proportion of these things that should be charged to this account and had made an equitable—given an equitable proportion on the basis of that actual determination? Did you make any inquiries about that?

A. Not as to that, no.

Q. You didn't make any inquiry as to that?

A. No. In other words, the company in 1929—that is, the management of the company, had exercised a choice—when they charged the item to expense at first; then they come along a year later and make a transfer to capital account. In other words, they were reaccounting for items that they expensed in 1929.

Mr. Lange: Who made the transfer at that time?

The Witness: The company auditors.

Mr. Lange: What company?

The Witness: Henry L. Doherty & Company.

By Mr. McCreery:

Q. Mr. Vaught, frequently in finally closing a company's accounts, those accounts are closed at the time of the general audit, immediately after the close of the year, are they not?

A. That is true.

Q. That is a common practice with all companies, is it not?

A. Yes.

Q. And whatever was done in this respect was done immediately after the close of the year, upon the final determination by the auditor of the entries to be made, is that not true?

A. That is true, yes.

Q. And the entries were made in 1930, not in 1940, isn't that true?

A. That is true, that's right.

Q. Long prior to the passage of the Natural Gas Act or the promulgation of the system of accounts of the Federal Power Commission in relation to natural gas companies?

A. That is true, yes.

Q. And in connection with the final closing of the books by the company in the usual practice of companies?

A. This was in May of 1930.

Q. That was the first auditing after the close of the year, was it not?

A. That is true, but Colorado-Wyoming—they close their books every month and—

Q. They have an annual—

A. I don't think they made an error.

Q. I am asking you a question of fact and then you can express your opinion.

Mr. Lange: I don't believe he had quite finished.

Mr. McCreery: Pardon me.

The Witness: And in my opinion; that is, before such an entry can be made there should be documentary evidence to show that the error was made, if an error was made in charging these items to expense when they should have been charged to capital.

By Mr. McCreery:

Q. Now, isn't this true, that this tabulation at the bottom of Page 3 was an estimate made right at the close of 1930 and prior—1929, and prior to 1930 and for the year 1930, that estimate at the bottom of the page—was made prior to the year 1930, at the end of 1929, was it not?

A. I think this was made about May 1930.

Q. So the estimate for 1930 was made in May 1930?

A. That is right.

Q. That is the time you think it was made?

A. Yes.

Q. So that the estimate to work out a final charge for 1930 was made early in the year for which it was made?

A. About May I think.

Q. Now, on what authority, Mr. Vaught, did you feel justified in making these changes?

A. I think on the authority of good accounting practice, and then, too, the system of accounts.

Q. Well, now, let's find out which you are relying on. Are you relying on the system of accounts of the Federal Power Commission in this connection?

A. Not necessarily, no.

Q. I asked you whether you are.

A. Not necessarily.

Q. Are you or not?

A. Not necessarily. I think both apply.

Q. Now, just answer the question. You can either answer yes or no.

A. Both the system of accounts and good accounting practice are my reasons.

Q. So in part, then, you relied on the system of accounts?

A. I think so.

Q. Well, now, let's make up your mind, Mr. Vaught.

A. I relied on both.

Q. All right, that's what I was asking. Now, what general accounting practices have been violated in these entries?

A. Well, getting back to the fact of this arbitrary percentage of an estimated amount—

Q. Just a minute. Let's go back to your accounting practice first. You are assuming that it is arbitrary to prove that it is arbitrary. Now, I want to know on what basis you determined it is arbitrary.

A. The lack of any documentary evidence to show otherwise.

Q. Did you search for any documentary evidence aside from what was in the voucher?

A. That's all that was available.

Q. Did you ask for any other?

A. I believe I told you that we did.

Q. You said you asked for time sheets.

A. We did.

Q. Did you ask for anything else?

A. Time sheets, stores issues.

Q. You are sure you made these inquiries, are you?

A. I am.

Q. Have you any notation in your working papers about that?

A. No, I think it was discussed at the time, probably with Mr. Davis and Mr. Hurdle and a search was made for the time sheets.

Q. You think so?

A. I know so.

Q. And you made no reference to it in your working papers as a basis for your reversing of these entries?

A. I don't recall that I did. I might have. I don't recall that I did. I can check and see.

Q. Have you got working papers on it?

A. I think this is pretty well a working paper on this.

Q. Do you have any working papers?

A. No.

Q. This is all there is?

A. Yes.

Q. Did you make these entries under anybody's direction?

A. All the entries were made under the approval of Mr. Smith.

Q. I asked, did he tell you to make these entries? Did he give you directions as to what to do in this kind of a situation?

A. He probably told me to make some of them. I don't recall whether he told me specifically to make this one or not. He at least approved it.

Q. Now, going to your Entry No. 202 on Page 38, the adjustment for 5 per cent engineering fees, what was the basis on which you eliminated that?

A. I think on Page 4 it gives pretty well the reasons why the entry was made, and then on Page 4 of the written statement it says: "These fees are eliminated from plant investment because it is not clear that they represent the actual cost of services rendered or for that matter that service was ever actually rendered for them."

Q. Did you make any inquiry into that?

A. A letter was written to Mr. Davis requesting a detail of these charges as to their actual costs and was never furnished.

Q. Have you a copy of that letter?

A. I believe I do, yes.

Q. Will you produce that for me at your convenience?

A. All right.

Q. In connection with the plant account of Colorado-Wyoming Gas Company, after the elimination of the 5 per cent engineering, is there in connection with that entire account any entries, charges of any kind, covering designing and construction engineering in any amount?

A. I don't believe there is any shown as such.

Q. Did you find any?

A. I don't believe there is. I don't recall finding any, but the Doherty organization had some engineers out here and they were carried—no, they were paid a per diem—Colorado-Wyoming was billed per diem charges for these men during this construction period.

Q. After the whole designing plan had been worked out, is that not true?

A. I am not sure of that.

Q. As a matter of fact, whatever resident engineer there was, was there only after construction had started, is that not true?

A. No, I think they were—

Q. All right, get your figures.

Mr. Lange: Is there some detail of that on Page 84 of your Exhibit 199?

The Witness: Yes, Page 84, Exhibit 199, shows that there was total per diem charges for two of the H. L. Doherty & Company engineers, Mr. Burnham and Mr. Bussard, and I know in some instances that they were here during the preconstruction period; that is—

By Mr. McCreery:

Q. Did you understand, or is there any evidence that they had anything to do with design?

A. No, those charges came through the Doherty organization and usually just set forth—just billed them for services.

Q. As far as you know, then—

A. And would not describe what those services were.

Mr. Lange: You say did not?

The Witness: I don't believe they did, no.

By Mr. McCreery:

Q. As far as you know, there is in this plant account, then, no charge of any kind for design?

A. Before I would want to answer that, I would like to check to be sure.

Q. All right, but so far as you know now, that is true?

A. So far as I know right now, that is true.

Q. Subject to any correction, that is quite all right.

A. Yes.

Q. Did the Colorado-Wyoming Gas Company at any time have any purchasing department for the purchase of pipe and large supplies so far as you know?

A. Not so far as I know, no.

(Vol. 66, pp. 9522-9543.)

* * * * *

Q. Now, referring to Entry 203, upon what evidence did you eliminate the legal charges referred to in your Entry 203, summarized on Page 38 and as set out at Page 11 of your Exhibit 199?

A. Upon what evidence did I eliminate them?

Q. Yes.

A. I think you might say principally due to lack of evidence.

Q. Lack of evidence?

A. As shown by the voucher, to show that these items were proper charges to plant account.

Q. Did you ask for any detail?

A. I believe—yes, we asked for detail.

Q. Now, as a matter of fact, Mr. Vaught, on any occasion when you asked for detail on legal expenses, you got it, didn't you?

A. That is true, yes.

Q. Now, are you sure you asked for detail on this?

A. I would want to check to see.

Q. How would you check to see?

A. Correspondence—see if it was requested in detail.

Q. Will you check that, please?

A. Yes.

Q. And report back.

A. Yes.

Q. Mr. Vaught, at the time that these charges were made, the new and enlarged plant between Littleton and Fort Collins was in process of development and construction, was it not?

A. That is true, the main construction was during 1929, I believe.

Q. Those two years is when the whole plant from Fort Collins south to Littleton was projected and largely constructed?

A. What two years?

Q. 1929 and 1930.

A. I think the major charge here is for 1929.

Q. 1928, 1929 and 1930—three years.

A. I think 1929 and 1930, but I hardly think 1928 would be one of the years.

Q. You think it was not. Did you make any inquiry to determine that?

A. Other than to know the period during which construction was going on.

Q. Well, in the development of an enterprise from the point of view of the element of construction costs, does it originate on the day its actual construction starts? In other words, is there not always in an enterprise of this size some considerable preparation? We'll assume the construction started in March 1929. Isn't there normally a very substantial period of preparation before the beginning of actual construction on an enterprise of this kind?

A. I think that is usually true, yes.

Q. Now, did you make any inquiry into both the preliminary work in 1928 and the work in 1929, of the legal assistants of the company with respect to the development and construction of this part of the enterprise?

A. Not unless—that is, what might be shown in the correspondence file.

Q. Did you go into the correspondence file?

A. I am talking of the request that was probably made of the detail of these services.

Q. What do you mean, "probably made"? Do you think you made one?

A. I want to check first, yes.

Q. Did you go into the correspondence file?

A. Of Colorado-Wyoming?

Q. Yes, with respect to this matter.

A. I don't recall that we did, no.

Q. You would recall it if there was a very substantial file covering this particular matter, wouldn't you?

A. Not necessarily, no.

Q. You might even forget that?

A. No, I don't think I would forget it.

Q. Then you would recall it if you had examined such a file?

A. That is right.

Q. Did you examine their files in respect to the acquisition of rights of way of various kinds for a distance of a hundred miles?

A. I examined many of the rights of way themselves and information as shown by vouchers, and on the rights of way themselves it indicated that most of the rights of way, I be-

lieve, were secured—well, generally by employes of the company; that is, Mr. Thackrey and Mr. Shortess.

Q. And how did you so determine, Mr. Vaught?

A. From the vouchers themselves, which showed the approval of—

Q. They were approved by these officers?

A. No, when the right of way payment was made, they were usually made on a petty cash voucher by one of these—

Q. What does that prove? Does that prove that the title and the contract and so on had not been prepared and considered and examined by legal counsel?

A. No.

Q. Not at all, does it?

A. No.

Q. Did you find a large number of extensive contracts dealing with rights of way over ditches, public highways, railroads and other interests of that kind, or did you look for those?

A. Oh, there were a few of those.

Q. A few of them?

A. A few of them.

Q. What do you mean by a few?

A. Oh, I don't know exactly how many, but there were a few of these ditch companies.

Q. A few ditch companies?

A. Yes. I don't recall how many, though, to be exact.

Q. None of these facts that we have just been discussing here entered into your consideration of this entry, did they?

A. Well, in the absence of detail as to—

Q. Just answer my question first.

A. Yes, they entered into it.

Q. Now, how much did they enter into it?

A. In other words, the information was not made available to us as to—

Q. You just stated they entered into this. Now, I want to know how and to what extent they entered into your consideration of the matters covered by your Entry 203.

A. To the extent that we were interested in knowing the detail behind the voucher as to the—

Q. What detail did you see and what detail did you get?

A. Only as shown here in the entry.

Q. And as a matter of fact, according to your entry, you

had no information whatever and threw it out. That's what your entry says.

A. That's true. In other words, the largest item is $7500 and the information as shown on the voucher itself states: "Professional Services for 1928 and 1929."

Q. That's all you relied on?

A. I wouldn't say it is all.

Q. You say it is. I am just asking you whether it is or not. I can only take your statement.

A. I know that we attempted to get information regarding the detail.

Q. What information did you attempt to get?

A. The services actually performed in order to determine whether or not they were applicable to the plant account.

Q. And to whom did you go for that information?

A. The company.

Q. Who in the company?

A. That is one of the things I asked you to let me check.

Q. And whether you had written a letter to that effect?

A. That is true. That's correct.

Q. Isn't it true, Mr. Vaught, that any information in the company's files whenever you wanted anything, it has been available to you, has it not, in all of your exhibits?

A. That is right.

Q. So that whatever information that was there was available to you, was it not?

A. That is true, yes.

Q. All right, now, what did you do? Did you seek to find out anything about the problems in connection with construction and development of this scheme in 1928 and 1929 or not?

A. No, we attempted to, as I told you before, to get the detail behind the vouchers, and in the absence of any detail we were unable to determine that it was a proper charge to capital account.

Q. You are saying here that you attempted to get the detail back of these vouchers.

A. That is true, and we did get the detail back of some of these vouchers. I think you furnished it on one or two or three of yours.

Q. On 1938 and 1939, at the request of the Commission. There has been no request ever came for anything else.

The Trial Examiner: You say 1938 and 1939?

Mr. McCreery: Yes, 1938 and 1939. This is 1928 and 1929. I think that Mr. Smith will agree that all the information that has been requested, that we have tried to supply it. Isn't that true in that respect?

Mr. Smith: Are you speaking of Lee, Shaw and McCreery?

Mr. McCreery: Yes.

Mr. Smith: I think that is correct.

Mr. McCreery: That is the reason I am inquiring.

The Witness: Well, this is all the information that was available to us.

By Mr. McCreery:

Q. It was?

A. I believe that is true. However, that is subject to check, which I want to make on it.

Q. You want to determine whether or not you wrote a letter asking for it?

A. Yes.

Q. And you will report back whether or not you did, and if you have it you will produce the letter?

A. Yes.

Q. Now, under what authority do you proceed in disallowing these items under the circumstances which you have indicated you disallowed them?

A. I think it would be strictly accounting—

Q. How's that?

A. Strictly accounting—on good accounting principles, and lack of any evidence to show that it was applicable as a proper charge to plant account.

Q. And it is good accounting practice not to make the effort to find out? Is that good accounting practice to you, Mr. Vaught?

A. No, I don't think so, but I think an attempt was made to determine—

Q. But you are going to produce anything that you have. All right. You have stated that you are going to look for the letter and, of course, any request that was made, it would have been made in writing as in the case of others, would it not?

A. That is true—you say any request?

Q. With respect to these items for the detail.

A. Oh, we were over there in person. We could have made a verbal request. That is very possible.

Q. You say you don't know anything about it as to whether you have a letter. Now, if you have a letter, you produce the letter.

A. Yes.

Q. Isn't it a fact, Mr. Vaught, that in your checking not only of this company but in your auditing experience before, you have encountered very very many instances where the particular voucher may not show the detail. Is that not true?

A. That is true.

Q. And is it your invariable practice in such cases in all of your auditing to say, "Out goes the account"?

A. No, the question here is whether or not it is chargeable—whether it should be an item—

Q. I understand that, but you have thrown it out of the account to which it was charged and you say it was expense instead of capital. Now, you have done that on the basis of the fact that the voucher itself did not contain a lot of detail. Now, invariably when you don't find detail on the voucher, do you throw it out or transfer it from capital to expense or in whatever way you want to deal with it?

A. I think the usual practice is to try to determine the extent; that is, the reason for the expenditure and try to get it in its proper place.

Q. That's right. Now, what you propose to do with this on the showing that you say is made—you threw it just into expense.

A. It is being transferred to expense, yes.

Q. Now, is there any more justification for allowing it as an expense item than as a capital account item? What's the difference in accounting?

A. Well, if it is not a proper charge to capital, then it must be an expense item. It is unquestionable.

Q. How is that?

A. If it is not a proper charge to capital, then it has to be an expense item.

Q. What is your assumption on that?

A. I don't believe I have made any.

Q. You have made none?

A. That's true.

Q. Now, the fact that the management happened to be on the job at this particular time and allowed the account under the circumstances as capital account, does that carry any weight with you?

A. Read that, please.

(The question referred to was read by the reporter, as set forth above.)

The Witness: No, I think that they were in error in charging it to capital account.

By Mr. McCreery:

Q. Now, the judgment of the management at the time, then, carries no weight with you?

A. Not if that judgment were in error, no.

Q. You are assuming something here. You haven't got any evidence. There is no evidence, you say, to show one way or the other, and I asked you if you would give any weight whatever to the determination of management and then you assume instantly that it is in error and, therefore, say they should not, but you are in the position of undertaking to determine whether it is an error. You haven't got that determined yet.

A. I think the lack of information as to show the charge is a proper capital charge is enough to say they were in error on it.

Q. So you give it no weight at all, the determination of management at that time as compared to your determination in 1941?

A. No.

Q. That's right. All right.

The Trial Examiner: We will stand in recess for five minutes.

(At this point a short recess was taken, after which proceedings were resumed as follows:

The Trial Examiner: The hearing will be in order.

By Mr. McCreery:

(Vol. 66, pp. 9543-9555.)

* * * * *

Q. For the purposes of this rate hearing, then, you undertook to set up the complete plant account?

A. We took the plant account as per books at December 31, 1939, and certain adjustments and arrived at the schedules shown in the exhibit.

Q. Then what did you show in your Exhibit 199 to be the Colorado-Wyoming Gas Company investment in gas plant as of December 31, 1939 under your adjustments?

A. Well, I would like to refer you to Page 36 of the Uniform System of Accounts.

Q. Well, just a moment.

A. This is in explanation of the amount that is shown in the total gas plant.

Q. Supposing you answer the question and then give your explanation.

A. The total gas plant is shown as per books, December 31, 1939, to be $1,860,551.93.

Now, referring to Page 36—

Q. What does that show as adjusted?

A. As adjusted, $1,756,193.58.

Q. Now, do you wish to make a further explanation by reference to the Uniform System of Accounts?

Mr. Lange: Before we get away from that, that's at Page 37 of your Exhibit 199?

The Witness: That is correct.

Now, referring to Page 36 of the Uniform System of Accounts under "Instruction 1. Purpose of Gas Plant Accounts," Paragraph A, which says: "The summary gas plant accounts are as follows:" and it includes under the Paragraph A, Account 100, "Gas Plant," and also Account 107, "Gas Plant Adjustments." So the total gas plant as

shown on Page 37 of Exhibit 199 conforms to Paragraph A of Instruction 1.

By Mr. McCreery:

Q. Now, in that adjusted figure as you have adjusted it to $1,756,193.58, is there in that figure any going concern value?

Mr. Lange: Well, that going concern value—

Mr. McCreery: Just a minute. I have a right to ask that question.

Mr. Lange: Well, that going concern value is purely a legal conclusion. It may cover a lot of things and it may not. You might define what you mean by that.

By Mr. McCreery:

Q. Have you covered anything in your figure except the bare bones, physical property, and the capitalized overhead in relation thereto?

A. No, we have included only what we have determined to be original cost.

Q. Bare bones?

A. That's right.

Q. Did you have any instructions either to consider or not to consider going concern value in the preparation of Exhibit 199?

Mr. Lange: Well, I still urge the objection.

Mr. McCreery: I asked him if he had received any instructions.

Mr. Lange: I urge counsel to define what he means by going concern value.

Mr. McCreery: I asked him if he got instructions.

The Witness: None that I remember, no.

(Vol. 66, pp. 9874-9876.)

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Investment in Gas Plant, per books and as adjusted by the witness, as of December 31, 1939, was $1,860,551.93 and $1,665,031.36, respectively, a net difference and reduction of $195,520.57 by the witness. (Ex. 199, p. 37.)

It is unnecessary to consider in this connection the reclassification entries of the witness. The entries made by him which constitute eliminations from the Plant Account are identified as Entries 200 to 223, inclusive, except Entries Nos. 209, 220 and 221 which are reclassification entries. The several elimination entries will be separately considered in this record.

The character of the study and exhibit (199) of the witness Vaught is further described by him, as follows:

"Q. Have you covered anything in your figure except the bare bones, physical property, and the capitalized overhead in relation thereto?

"A. No, we have included only what we have determined to be original cost.

"Q. Bare bones?

"A. That's right."

(Vol. 68, pp. 9875, 9876.)

* * * * *

"Q. Now, the fact that the management happed to be on the job at this particular time and allowed the account under the circumstances as capital account, does that carry any weight with you?

* * * * *

"A. Not if that judgment were in error, no.

"Q. You are assuming something here. You haven't got any evidence. There is no evidence, you say, to show one way or the other, and I asked you if you would give any weight to the determination of management and then you assume instantly that it is in error and, therefore, say they should not, but you are in the position of undertaking to determine whether it is an error. You haven't got that determined yet.

"A. I think the lack of information as to show the charge is enough to say they were in error on it.

"Q. So you give it no weight at all, the determination of management at that time as compared to your determination in 1941?

"A. No."

(Vol. 66, p. 9554.)

With respect to *Entry No. 200, Exhibit 199,* "Interest on Excess Capacity," testimony on cross-examination was as follows:

"Q. Refer to page 38 of your exhibit. I notice Entry No. 200 refers to elimination of interest on excess capacity.

"A. That is right.

"Q. In considering that column, did you consider at the time that in the years 1928 and 1929 and 1930 the available gas supply of the Colorado-Wyoming Gas Company as it was then derived from the Wellington field of the Continental Oil Company was in process of rapid exhaustion?

"A. No, I didn't investigate that.

"Q. You didn't consider that?

"A. No.

"Q. Did you consider the fact that there had been developed in the Colorado-Wyoming system as it existed prior to the construction of the line from Fort Collins to Littleton a demand of approximately a million, six hundred thousand Mcf. annually?

"A. No.

"Q. You gave no thought to that?

"A. No.

"Q. Did you know that there had been and was actually developed a load and service aggregating that or substantially that amount in Fort Collins and in the Cheyenne area?

"A. No.

"Q. You did not have that in mind?

"A. I didn't consider it.

"Q. Did you have in mind the occasion for construction of the line from Fort Collins to Littleton to connect with the Colorado Interstate line at that point? Do you know why it was done?

"A. Yes.

"Q. Why was that?

"A. It was to deliver Texas gas north to Fort Collins.

"Q. And why was it necessary to deliver the Texas gas to Fort Collins and the Cheyenne area?

"A. My understanding was that it was caused by the depleted conditions of the Wellington field.

"Q. The Wellington field was rapidly depleting?

"A. That is right.

* * * * *

"Q. Did you have in mind that as between the years 1929 and 1930 and again as between the years 1930 and 1931 the very substantial decrease from year to year in those two years of the supply of gas from the Wellington field? Was that in your mind in considering this?

"A. No, it wasn't.

* * * * *

"Q. Do you know whether as a matter of fact that the supply of gas from the Wellington field rapidly depleted in those years and the new line from Fort Collins to Littleton was put into service to take up the difference between the dwindling supply and the existing demand in the Fort Collins and Cheyenne Area?

"A. That would necessarily follow.

"Q. Did you have it in mind in your consideration of this account?

"A. No, I did not.

"Q. I notice on page 4 you refer to the interest on excess capacity; on page 3 is an unusual item, and then on page 4 you make this statement:

" 'These charges, made after construction of the company's plant was complete and in operation, were based upon a portion of the cost of property south of Fort Collins, Colorado, whose capacity was in excess of that required to handle the volume of business actually done;'

* * * * *

"Q. * * * The Fort Collins-Cheyenne load in the approximate amount I have given, which is for the purpose of this question, was not a load to be developed but was at that time an existing load?

"A. It was, yes.

"Q. And it is not true that at this particular time what had been the original system of the Colorado-Wyoming Gas Company was completely changed and what was in effect a brand new system constructed and placed in operation on the completion of the connection with Colorado Interstate Gas Company at Littleton and the connection at Fort Collins with the old system on the north?

"A. Well, it was a development, yes. I wouldn't say it was entirely a new system.

"Q. It was fundamentally different, was it not?

"A. It was, yes.

"Q. Did those matters enter into any consideration on your part in considering this Entry No. 200?

"A. No."

(Vol. 66, pp 9522-9527.)

Company Exhibit No. 245 (Appendix this Record).

J. L. WILLARD, rate and valuation engineer, in rebuttal to the foregoing testimony of Commission witness Vaught, testified for Colorado-Wyoming Company.

Exhibit 245 (see Appendix) prepared by the witness was described by him as follows:

"A. Exhibit 245 is entitled 'Revised Exhibit No. 111, Plant; Revised Exhibit No. 115, Earnings; Revised Exhibit No. 117, Plant "Sales for Resale"; Revised Exhibit No. 117, Earnings "Sales for Resale"; Revised Exhibit No. 118, Plant "Sales for Resale--Cheyenne"; Revised Exhibit No. 118, Earnings "Sales for Resale—Cheyenne", Years 1939-1945'.

* * * * *

"This exhibit contains revised data previously submitted in Exhibits No. 111, 115, 117 and 118.

"The tabulations herein have been computed in the identical manner and method as in the original exhibits. They are presented only for the purpose of reflecting the effect of certain eliminations from the original figures and are not to be construed as a recognition that the eliminations are justified. Net additions to investment between September 30, 1940, and December 31, 1940, are also included.

"The eliminations reflected in revised Statements Nos. 1 and 2 of Exhibit 111 are as follows:

"(1) Engineering charge of 5 per cent in the amount of $82,792.57 has been deducted from the various accounts affected. (Ex. 199, Entry 202.)

"(2) Account 1021 has been credited with $51,887.25 which is the difference between the total interest capitalized on non-utilized facilities $79,362.52 and the amount of interest calculated in Exhibit No. 244, to-wit: $27,475.27. (Ex-199, Entry 200.)

"(3) Account 1013 has been credited with $2,844.90 'cash discount' as described in Entry No. 204 of Exhibit No. 199.

"(4) Account 1014 has been charged with an amount of $3,278.54. This amount is the net result of Entries 213, 214 and 215, and 216 of Exhibit No. 199.

"(5) Account 1014 has been credited $2,111.24. This amount is reflected as a part of Entry 218 of Exhibit 199.

"(6) Account 1014 has been credited $1,001.31. This amount is described in Entry No. 219 of Exhibit 199.

"The revisions to Exhibits 115, 117 and 118 reflect a redistribution of total investment as revised in Exhibit 111, to plant applicable to 'Total Sales for Resale' and 'Sales for Resale at Cheyenne.'"

(Vol. 83, pp. 12,440-12,442.)

The foregoing revisions of and eliminations from Statements Nos. 1 and 2, Exhibit 111, reflected in Exhibit 245, modify and revise "Plant Applicable to Sales for Resale" (Exhibit 117) and "Plant Applicable to Sales for Resale, Cheyenne, Wyoming" (Exhibit 118) and also were used in "Net Return" (Exhibit 248).

(For Exhibits 111, 117, 118, 245 and 248, see Appendix.)

(Vol. 83, p. 12,442; Vol. 84, pp. 12,668, 12,669.)

J. L. WILLARD, recalled as a witness by and on behalf of the Respondents, having been previously duly sworn, was examined and further testified as follows:

Cross Examination.

By Mr. Lange:

Q. Mr. Willard, referring to your Exhibit 245, you made the statement when you presented this exhibit on direct examination that it was prepared and submitted with the

reservation that you state in the written statement that it has a limited purpose only, is that correct?

A. Yes, that is correct. It is just to reflect for the benefit of the Commission the effect of certain controversial items in the allocation of those items to the classifications previously submitted on total sales for resale and sales for resale at Cheyenne.

Mr. McCreery: And plant account, as well?

The Witness: That is correct. That is reflected all the way through in those classifications.

By Mr. Lange:

Q. In other words, the revisions—or rather the tabulations that are set up in this Exhibit 245 revise or modify those previously set up by you and Mr. Hancock in Exhibits 111, 115, 117 and 118?

A. That is correct.

Q. And the major revisions are those set out and enumerated in the statement of the exhibits on pages one and two of Exhibit 245? All of them are set forth?

A. All of them.

Q. And the first set forth there; that is, the engineering fee of 5 percent, totalling $82,792.57 is the same that appears in Commission's Exhibit 199, pages 85 to 86.

A. That is correct.

Q. Do you have Commission's Exhibit 199 there?

A. Yes.

Q. That is at page 86 of the Exhibit 199, and it relates to the entry No. 202 in Exhibit 199.

A. Yes, sir, that is correct.

Q. In other words, it is set forth in entry 202 at page 4, and then again the description of it appears at page 86 of the Exhibit 199, *colume* 3.

A. Yes, sir.

Q. $82,792.57.

A. Yes.

Q. So you have revised your exhibit first of all to that extent.

A. Yes, sir.

Q. And then in the next item is the account 1021. That is the item of the total of $79,362.52 that covers the item of excess capacity that had been set up in your Exhibit 111

and included in account 1021, "General Construction Expenditures" of $91,619.13.

A. It is a part of that total, yes, sir.

Q. And you are revising that to the extent of leaving only the sum of $27,475.27 to be capitalized as previously described in your Exhibit 244. You are still capitalizing $27,475.27 there, aren't you?

A. I am still including in this recomputation of these allocations an amount of $27,475.27.

Q. It in effect reduces—well, it directly reduces the total of $79,362.52 to this $27,475.27 in this revision?

A. In this revision.

Q. For this purpose as you stated.

A. That is correct.

Q. And as I say, you had previously in your Exhibit 244 discussed the method that you pursued, didn't you?

A. Yes, sir.

Q. On that particular item.

A. Yes, sir. However, in Exhibit 244 I did not cover necessarily all of the properties that could have been covered in that calculation. For instance Arvada Compressor Station was somewhat in the same category as was the 6 inch line to Greeley.

Q. That's right, and you tie in this figure, the total of $79,362.52—that affects entry No. 200 at page one of the Commission's Exhibit 199.

A. That's correct.

Q. That is the same item.

A. Yes.

Q. Now the next, No. 3, is the one in account 1013, and you refer to the entry number in Commission's exhibit on that one as well as on No. 4?

A. Yes, sir.

Q. Also No. 5 and No. 6.

A. Yes, sir.

Q. And the next items aren't in any numbered paragraph, but you have them cross referenced to the particular entries in the Commission's exhibit, haven't you?

A. The two entries affecting expense are indicated in the written statement on page two as being entries Nos. 100 and 101 of Exhibit No. 202.

Q. Yes, that is right. Oh, yes, now your comment on

the following page on Exhibit 227. Exactly what is your purpose in setting that up, Mr. Willard?

A. My purpose in setting that up is merely to show the amount of investment mainly in the percentage of the total investment of the plant that Mr. Lyon has assigned to direct industrial customers in order to calculate his total service cost for that direct industrial sales.

Q. Which of these figures on this comment page are taken from Mr. Lyon's testimony or exhibit?

A. The figures on that page are all computations from the figures in Mr. Lyon's exhibit, and I can follow each one of them through from his initial figure to these figures if you so desire.

Mr. McCreery: May I make this suggestion, if it would save time: that we would be very glad to simply put in the record the computation, if you like.

Mr. Lange: Yes.

Mr. McCreery: That would save time.

Mr. Lange: That's all right.

Mr. McCreery: We can do that.

The Witness: I have furnished that to the Commission's engineers.

Mr. McCreery: The engineers and accountants have already seen the working papers, but if it will save time we can put it in the record.

Mr. Lange: And let it be Exhibit 245-A.

Mr. McCreery: All right.

The Trial Examiner: I don't believe it is adequately described for the purposes of the record.

Mr. Lange: It is a computation prepared by Mr. Willard.

Mr. McCreery: That explains the whole procedure by which those figures were arrived at.

Mr. Lange: I suppose it would be a computation prepared by Mr. Willard in re: Exhibit 227.

Mr. McCreery: Mr. Willard and Mr. Jorgensen, and we will put it in as 245-A. That will be put in tomorrow or the next day and copies furnished.

The Trial Examiner: It will be marked for identification, then, as Exhibit 245-A.

(Exhibit 245-A, Witness Willard, marked for identification.)

By Mr. Lange:

Q. Now, the next page, present value, as indicated by you, is present value as of December 31, 1941, isn't it?

A. That is correct, including tangibles.

Q. Is that what you intend it to be?

A. Yes, and by present value in this instance I mean the depreciated value of the physical property that now comprises the system together with the expenditures contemplated during the year 1941 on the Arapahoe Compressor Station, and including working capital.

Q. Working capital is the estimated figure?

A. That is correct.

Q. As well as the 1941 additions; they are also estimated?

A. Yes, they are estimated on a budget requesting an expenditure.

Q. I mean they aren't actual.

A. That is correct.

Q. Now, as I understand it from your written statement you have given effect to these several changes as set forth on pages one and two of your Exhibit 245 in the schedules that follow, is that correct—in the same exhibit?

Mr. McCreery: As set forth on the cover.

The Witness: Yes. The revised statement 1, and statement 2 of Exhibit 111 affect in the main the investment listed for revised Exhibit No. 117 and revised Exhibit No. 118. The only way in which they are reflected in the earnings statement of revised Exhibit 117 and 118, and together with revised Exhibit 115 is in a calculation of income tax.

Mr. McCreery: And the two specific items mentioned on page 2 of the statement.

The Witness: Yes, sir.

By Mr. Lange:

Q. And also, I don't believe in your revised Exhibit 117

you had previously amortized any regulatory expense, had you?

A. That is true. This amortization of regulatory expense is an additional calculation of the original exhibit.

Mr. McCreery: It is put in both ways.

By Mr. Lange:

Q. The same is applicable to the Exhibit 118; that is, to revised Exhibit 118, that also has the amortization prosion that is not in Exhibit 118.

A. That applies to revised Exhibit 115, 117 and 118 on the earnings statement.

Mr. McCreery: Well, those figures, for the record, come from Exhibit 242, the Table there set forth entitled, "Breakdown of General Expense" which is Mr. Davis' exhibit.

Mr. Lange: I believe that is all on that exhibit.

(Vol. 85, pp. 12831-12839.)

* * * * *

Company Exhibit 244 (Appendix this Record).

Witness *Willard* presented Exhibit 244 entitled "Interest on Non-Utilized Facilities to Provide Essential Substitute Gas Supply to Original Fort Collins-Cheyenne System" (see Appendix), which deals directly with Entry 200, Exhibit 200.

In this exhibit, interest on non-utilized facilities was set at $27,475.27 by the witness.

The witness pointed out with respect to the elimination entry (No. 200) "Interest on Excess Capacity" that:

> "This adjustment reflects the fact that Mr. Vaught did not consider the history of the construction, operation and expansion of the Colorado-Wyoming Gas Company's present system. These elements were considered and controlled the management, at the time, in capitalizing the item in question.
>
> "The original facilities including all investment from Fort Collins north to and including Cheyenne, Wyoming,

were constructed in 1925 and 1926, and were supplied with gas from the Wellington field north of Fort Collins. In 1929 the supply from this field was rapidly diminishing and was known to be approaching exhaustion; and new construction was necessary from Littleton to Fort Collins to take the place of such diminishing supply if the Fort Collins-Cheyenne system was to be saved and continue useful. It was, of course, good judgment to install at the outset a line of sufficient size and character to meet fully the then requirements of such original system and facilities for utilization upon the complete exhaustion of the Wellington field gas supply rather than to construct smaller lines at much greater expense, sufficient to meet the requirements from year to year during the process of depletion. Such construction from Littleton to Fort Collins was at that time projected, constructed and dedicated to the original system to the extent necessary to meet and carry the then existing requirements thereof.

"The annual purchases of gas in Mcf. by the company during the years 1928 to 1932, inclusive, were as follows:

"1928:	Continental Oil Company	2,254,599
	Colorado Interstate Gas Co.	.....
	Myer Goodstein	.....
"1929:	Continental Oil Company	1,718,642
	Colorado Interstate Gas Co.	33,943
	Myer Goodstein	.....
"1930:	Continental Oil Company	1,275,030
	Colorado Interstate Gas Co.	888,112
	Myer Goodstein	57,618
"1931:	Continental Oil Company	453,955
	Colorado Interstate Gas Co.	1,800,153
	Myer Goodstein	77,284
"1932:	Continental Oil Co.	163,078
	Colorado Interstate Gas Co.	2,112,038
	Myer Goodstein	100,839"

The witness continued by stating that Exhibit 244 is for the purpose of illustrating and applying the principle involved in such capitalization. The construction of the line as a 10-inch and 8-inch line resulted in an expenditure for

facilities that could not be utilized until required by the progressive depletion of the Wellington Field. Due to this progressive depletion it was necessary to supply the demand of the north part of the system until the Wellington Field was depleted. The witness continued:

"Based on the foregoing facts, and deliveries of the system on December 26, 1938, the investment in the main 10-inch and 8-inch lines from Littleton to Fort Collins in this exhibit, has been allocated proportionately to the original system and facilities of the company from Fort Collins to Cheyenne, Wyoming.

"From the deliveries on that day it has been determined that the original facilities of the north system required approximately 63.6 per cent of the investment in the 10-inch line and 84.9 per cent of the investment in the 8-inch line.

"The requirements of the original facilities of the north system for Texas gas on that day were 8818 Mcf. at a pressure base of 12.9 pounds, although the daily maximum requirement of the north system in 1928, substantially exceeded the above amount.

"The actual maximum daily deliveries of Texas gas to the original facilities have been recorded from February 1930 through December 1932. As each successive new maximum daily delivery was made that proportion of the required investment went into service in the ratio the actual deliveries bore to the total ultimate requirement. Interest has been computed on the balance of investment in the non-utilized facilities during the several periods, through the year 1932. The result of the several calculations indicate total interest of $27,475.27.

"It is my opinion that this is a minimum amount of interest to be assigned to the main 10-inch and 8-inch lines, in connection with such construction to provide essential substitute gas supply to the original Fort Collins-Cheyenne system."

(Vol. 83, pp. 12,436-12,439.)

On cross-examination *Willard* testified that the item of $79,362.52, capitalized on the books of the Company, was

part of Account 1021 in Exhibit 111, (shown in breakdown thereof, Exhibit 146) (Vol. 84, p. 12,599) and according to the principles adopted by the officers of the Company, the witness believes that it was properly capitalized. (Vol. 84, p. 12,598.) He stated that the calculation in Exhibit 244 was to show the principle adopted by the Company in making the total charge. The amount computed by him in Exhibit 244 was used in Exhibit 245, for the reason that the $79,362.52 amount was a controversial item, and the use of the $27,475.27 figure computed by him in Exhibit 244 was to show the effect of the allocation of this amount of money in "Total sales for resale" and "Sales for resale at Cheyenne." The witness further stated, "It is not necessarily superseding the previous charge in the new exhibit with the idea of this being the correct amount. It is just to show to the Commission the effect of controversial items in those allocations." (Vol. 84, pp. 12,598-12,599.)

The witness was asked if, under his method of computation, a lateral was constructed to an industrial plant off the main line and full capacity of the lateral was not used for several years, then under the principle in Exhibit 244 would interest on excess capacity be charged during the intervening period.

The answer was:

"No, because the line went into service and under the ordinary sense of service it is in full service. This proposition with the 8 and 10-inch line was somewhat different than that, in that it was necessary to construct this line, as I have stated in the written statement accompanying this exhibit, in lieu of the diminishing supply at the Wellington Field. The Wellington Field served the entire north system for a period of several years, and when it was known that that supply was depleting, it was necessary to construct facilities to supply that part of the demand in the north system which could not be supplied by the Wellington Field, and rather than construct small lines from time to time to meet the then need of the north system, when the entire 8 and 10-inch line, was constructed. It is for that reason that the larger capacity was built at one time, but did not go into service, as I

see it, until the depletion of the Wellington Field was more or less complete."

(Vol. 84, pp. 12,600, 12,601.)

He further stated the industrial main line lateral in the supposed case would be definitely merely "idle plant." (Vol. 84, p. 12,605.)

The peak demand of the north system used in the exhibit was 8818 M. c. f. (the 1938 peak), although the peak demands of the north sysem in 1928 were substantially higher, and had that demand been used it would have resulted in a longer interest computation. In the situation here involved, the term "non-utilized facilities" relates to the actual advance construction for the use of Fort Collins and Cheyenne when the Wellington Field supply became exhausted. With respect to how he would proceed and for how long a period he would compute interest he replied, "I stopped when I felt that the Wellington Field as far as being useful in meeting the peak requirements of the north system was eliminated." In this case the capacity and facilities actually constructed and later used for that particular use, were not utilized for the period of three years that interest was computed in Exhibit 244. (Vol. 84, pp. 12,603-12,606.) The gas supply from the Wellington Field was negligible from 1932. (Vol. 84, p. 12,601.)

The item of interest on excess capacity was capitalized on the Company's books about April or May, 1930, for 10 months in 1930, 1931 and 1932. The entry was made after the completion of the construction work on the Arapahoe-Fort Collins main pipeline. (Vol. 84, p. 12,608.)

Work Order No. 126, dated November 17, 1931, was handed the witness by Counsel for the Commission, which read as follows:

"In accordance with practice established in 1930 under recommendation of the New York auditing department, interest at 6 per cent per annum will be charged on the value (at cost) of excess or unused capacity of pipe line and compressor stations of recent construction."

The witness replied he had seen it and believed that the entry was made pursuant to this work order. (Vol. 84, p. 12,609.)

Q. Now in your Exhibit 244, I believe you made a preliminary statement on direct examination that you have some limited purpose in presenting this exhibit, or what was that? I didn't quite recall what your statement was.

A. I think the statement was to the effect that this exhibit was made with the idea of showing the principle involved in calculating the interest item of $79,000 which is now on the books of the company.

Q. Now, that particular item is the item that you had set up in your Exhibit 111 as interest on excess capacity?

A. I had it set up in Account 1021.

Q. And your Exhibit 111?

A. Yes, it is a part of Account 1021 in Exhibit 111.

The Trial Examiner: And at that time you took the position that the whole $79,362.52 was properly capitalized by the company and included in the plant account?

The Witness: According to the principles adopted by the officers of the company. I think it was properly capitalized.

By Mr. Lange:

Q. Now, what is your purpose at this time of setting up only $27,475.27 in lieu of or instead of $79,362.52?

A. Do you mean in calculating that $27,000?

Q. Yes.

A. My idea in making this calculation in this exhibit was to show the principle that must have been adopted by the officers of the company in making their total charge of $79,000. I did not reach the $79,000 on this particular calculation.

Q. No, but is this calculation where you reach the result of $27,475.27 intended to modify or change the position you took in connection with your Exhibit 111 where you set up the $79,000 as properly capitalized on excess capacity?

A. Not necessarily in total, Mr. Lange. This exhibit, as I said, was calculated to show the principle. I have used this figure in a subsequent exhibit, 245, for the reason that I believe that it is a controversial item and it is the inclusion in Exhibit 245 of the amount that is calculated here. The reason for the inclusion of the $27,000 in that exhibit in lieu of the $79,000 which is in the original 111 exhibit is only to show the effect of the allocation of this

amount of money in "Total sales for resale" and "Sales for resale at Cheyenne." It is not necessarily superseding the previous charge in the new exhibit with the idea of this being the correct amount. It is just to show to the Commission the effect of controversial items in those allocations.

Q. In other words, that $79,362.52 is the same that was included in Account 1021, General Construction Expenses, totaling $91,619.13 in Exhibit 111?

A. That is correct, in the original Exhibit 111.

Q. Yes, appearing on Statement No. 3 of that exhibit, Page 8. Where else does that appear in your Exhibit 111?

A. Just a moment. I can check that figure that you have given. The total of that interest on non-utilized facilities included in Exhibit 111 is $79,362.52.

Q. That's right.

A. That appears on Page 9 of Statement 3 of Exhibit 111 under Account 1021, General Construction Expenditures.

Q. Yes.

A. And is a part of the total $91,619.13 comprising the whole of that account.

Q. That's right. Now, Mr. Willard, in following through on this computation or this method utilized by you in computing interest, which you term "excess capacity," supposing you had a lateral serving an industrial off your main line and that lateral may be several hundred feet or may be several miles in length, and as the industrial begins using that gas the lateral is actually in service. Isn't that right?

A. That is correct.

Q. And it may be a good many years before that industrial utilizes the entire capacity of that lateral, isn't it?

A. That is correct.

Q. You would be charging interest on excess capacity during that entire period?

A. No, I would not do that.

Q. Why not?

A. Because the line went into service and under the ordinary sense of service it is in full service. This proposition with the 8- and 10-inch line was somewhat different than that, in that it was necessary to construct this line, as I have stated in the written statement accompanying this exhibit, in lieu of the diminishing supply at the Wellington field. The Wellington field served the entire north sys-

tem for a period of several years, and when it was known that that supply was depleting, it was necessary to construct facilities to supply the part of the demand in the north system which could not be supplied by the Wellington field, and rather than construct small lines from time to time to meet the then need of the north system, the entire 8- and 10-inch line was constructed, it is for that reason that the larger capacity was built at one time, but did not go into service, as I see it, until the depletion of the Wellington field was more or less complete.

Q. And what year was that?

A. At the end of 1932.

Q. Well, how long did they continue to get the gas from the Wellington field after that?

A. They got it in very small quantities for several years. I could get that for you exact.

Q. Wasn't it up to about 1936 or 1937?

A. Yes, in 1937 they got 331 M cubic feet of gas from the Wellington field out of a total usage of 3,095,802 M cubic feet, which is about—well, it is such a fraction of one per cent that I can't very well figure it—about one-thousanth of one per cent of the total requirements.

Q. Well, the company had quite a number of customers attached to the south end of this line before the Wellington field was depleted, didn't they?

A. Yes, they had customers attached as construction was completed up to the particular localities they were to serve.

Q. And this substitution of the then intersection for the 8-inch section refers to, in this Valmont matter, that substitution which would of course require a change in design not originally contemplated?

A. Probably true, but as to cost, the difference in cost between an 8-inch and a 10-inch line from the Arvada station to the Boulder Junction would be very very small.

Q. Well, what do you mean by very very small, Mr. Willard?

A. I would judge somewhere around a thousand dollars per mile.

Mr. McCreery: And how many miles is that, approximately?

The Witness: I don't believe I have anything to check that on right now. I would venture an opinion.

Mr. McCreery: Of course, as a matter of fact, the entire capacity was utilized there in any event for whatever purpose it was constructed and it did not affect the portion of the Fort Collins requirements in any event, did it?

The Witness: It had no effect on the Fort Collins requirements.

Mr. McCreery: And that is an existing and known demand which this line was built to satisfy.

The Witness: That is correct, and I have not used in this Exhibit 244 a requirement of the north system that was as high as it had already used in the past, and it appears to me that in using the method I have taking this peak which was obtained in 1938, such peak being below previous requirements of the north system. I have adopted the conservative viewpoint.

Mr. McCreery: And the peak demand in 1938 was substantially higher than the peak that you have used as a measuring rod, is that not true?

The Witness: The peak in 1928?

Mr. McCreery: 1928, yes.

The Witness: Were higher than I have used.

By Mr. Lange:

Q. In this exhibit you again utilized the 1938 peak, didn't you?

A. That is correct.

Q. Now, I notice that in your exhibit on the page following Page 3 of the written statement, you phrase this as follows:

"Interest on non-utilized facilities."

What do you mean by "non-utilized"?

A. Non-utilized facilities are those facilities that did not go into service due to the demand on the line being lesser than the actual demand designed was.

Mr. McCreery: In its construction it was contemplated to use it for Fort Collins as the Wellington field supply became exhausted, was it not?

The Witness: That is correct.

Mr. McCreery: And that is what you mean by that phrase in relation to this situation?

The Witness: That's right, sir.

By Mr. Lange:

Q. All right, then, if you had ten years from the time of the beginning of service of the line before what you term the capacity of the line had been reached, how would you proceed with reference to your computation of interest?

A. I wouldn't proceed for ten years.

Q. You wouldn't?

A. No.

Q. Where does it stop?

A. I stopped when I felt that the Wellington field as far as being useful in meeting the peak requirements of the north system was eliminated.

Mr. McCreery: As a matter of fact, the peak demand in 1928 was in excess of the 8818 that you use and if you use the actual peak demand of that system as of 1928 you would result in a larger interest computation than you have here, would it not?

The Witness: That is correct.

By Mr. Lange:

Q. And what was the year that the Colorado Portland Cement Co. took its biggest load?

A. I believe that was in 1928.

Q. And going back to my original hypothetical problem, you say that if you had a main line industrial that was served off the lateral and that it took a good many years for that industrial to use the amount of gas that would be up to the capacity of that lateral, that would be a different situation?

A. Yes, sir, that would be definitely what you are terming idle plant.

Mr. McCreery: 1928 was the peak for the Colorado Portland Cement.

By Mr. Lange:

Q. And in such a situation you wouldn't have this interest on excess capacity applicable?

A. No, I don't think in that instance it is a proper charge.

Q. Mr. Willard, there isn't any question raised by you, but that these facilities of the company were completed and in service? There wasn't any more construction work to be done, was there?

A. No. The facilities were being utilized, but as I have said before, a portion of this main line was not utilized until this Wellington field was depleted. It was in those facilities that I calculated weren't utilized during this period of three years that interest has been calculated.

Q. That is, when you used the term "non-utilized," you mean the proportionate part of the line?

A. That is correct.

Q. There was gas actually flowing through the line to certain metering points?

A. Very definitely. This shows that in the month of February 1930 there was a peak of 4,171 Mcf. that went through that line.

Q. Now, turning to Exhibit 199, do you have it there?

A. I believe so.

Q. Mr. Vaught's Entry No. 200, page 1.

A. Yes, sir.

Q. You will notice that there are calculations for the years 1930, 1931 and 1932?

A. Yes, sir.

Q. As to the company's income as adjusted, and for each of those years. Have you checked those?

A. No, I haven't checked over his income statement.

Q. You haven't taken those into consideration?

A. No, sir.

Q. In your calculations at all?

A. No, sir.

Q. Nor the return that the company was earning at that time?

Mr. McCreery: Well, now, that's another matter.

Mr. Lange: As set out in this Page 1.

Mr. McCreery: As set out in this report.

Mr. Lange: Yes.

Mr. McCreery: That is another story.

By Mr. Lange:

Q. As set out on this page.

A. As I said, I have made no actual check of the income statement myself. However, I have no reason to believe of the method of computation by Mr. Vaught that there is anything wrong with this tabulation on the bottom of Page 1.

Mr. McCreery: On his premises?

The Witness: On his method, yes. I can't say that I agree with the methods.

Mr. Lange: Well, there may be a mutual disagreement between yours and ours.

Q. You say, I believe you stated in your cross examination that you had made no effort to determine what earnings the company had during those years.

A. No, sir, I wasn't concerned with earnings. I was trying to find the cost as reflected on the books of the company for the existing physical property.

Q. And did not endeavor to relate the company's net earnings during that period?

A. That would have meant nothing to me.

Q. For those periods, rather. I believe in our cross examination on Exhibit 111, the matter was gone into as to when this interest on excess capacity was set up on the company's books. Did I interrogate you about that at that time?

A. Yes, you questioned me about that, Mr. Lange, but just in what form I can't recall. As to the actual dates it was set up on the company's books, it was for the years —for ten months in 1930, the calendar years of 1931 and 1932.

Q. And do you recall when it was actually set up on the company's books?

A. If I am not mistaken, the first charge on the company books was sometime around April or May 1930.

Q. What was the occasion?

A. I am not sure of that.

Q. Do you know what the occasion was for setting it up?

A. Well, the occasion no doubt was to set up an interest

charge which the officers of the company deemed proper and advisable for the lack of use of facilities that were constructed in prior years.

Q. There is no question but that the—it was done long after the construction period had ended?

A. I don't think it was very long after, no.

Q. It was after the construction had ended?

A. Yes, and no doubt the interval may have arisen due to consultation and study as to just how to treat the matter.

Q. Mr. Willard, I have here a copy of notes on work orders. I wonder if you know about the work order No. 126 of November 17, 1931, which says, "In accordance with practice established in 1930 under recommendation of the New York auditing department, interest at 6 per cent per annum will be charged on the value (at cost) of excess or unused capacity of pipe line and compressor stations of recent construction."

A. Yes, I believe I have seen that.

Q. It was pursuant to that work order that this entry was made?

A. Yes. That was no doubt instructions from the New York office after general consultation with local company officers.

(Vol. 84, pp. 12597-12609.)

* * * * *

In *Entry 201, Exhibit 199,* the witness *Vaught* undertook to eliminate certain amounts of overhead expenses for the years 1929 and 1930, capitalized by the Company in connection with the then current construction of the Arapahoe Station-Fort Collins main line, sundry main line laterals, compressor stations and other facilities, as follows: $2,159.74 for 1929 and $3,195.00 for 1930, being 25% and 21.2% of spectively, of general overhead expenses for those years.

The reason assigned by the witness was:

"To eliminate amounts capitalized by the company representing arbitrary percentages of general expenses for 1929 and 1930. The attached schedule is a detail of the company's computation. It will be noted that the amount of $2,519.74 capitalized for the year 1929 represents an

arbitrary 25% of the accounts indicated. The amount of $3,195.00 capitalized for 1930 respresents various arbitrary percentages of estimated or assumed amounts for general expenses for 1930. The estimates which were used in computing the amount of $3,195.00 varied considerably from the actual amount of such expenses for 1930, as disclosed in the company's computation."

(Exhibit 199, pp. 2, 3.)

On cross-examination, *Vaught*, when asked to state why the capitalization was "arbitrary," answered variously: "It was the lack of evidence on the Company's books that shewed it was arbitrary" (Vol. 66, p. 9530); "there was no evidence as to whether or not these expenses were applicable" (Vol. 66, p. 9532); "as to whether we made any specific inquiry, I can't say that we did" (Vol. 66, p. 9533); "they (the Company) had no time tickets" (Vol. 66, p. 9533); as to legal fees ($100.00) no inquiry was made of the lawyer who furnished the services (Vol. 66, p. 9534); as to traveling expense "we examined the voucher and the voucher did not show that they were applicable" (Vol. 66, p. 9534); as to office supplies and rent, witness looked at the vouchers, but that was the end of his inquiry. (Vol. 66, p. 9535.)

He was then interrogated and answered as follows:

"Q. Did you consider whether or not the executives of the company may have considered carefully what was a proportion of these things that should be charged to this account and had made an equitable—given an equitable proportion on the basis of that actual determination? Did you make any inquiries about that?

"A. Not as to that, no.

"Q. You didn't make any inquiry as to that?

"A. No. In other words, the company in 1929—that is, the management of the company, had exercised a choice when they charged the item to expense at first; then they come along a year later and make a transfer to capital account. In other words, they were reaccounting for items that they expended in 1929.

* * * * *

"Q. Mr. Vaught, frequently in finally closing a company's accounts, those accounts are closed at the time of the general audit, immediately after the close of the year, are they not?

"A. That is true.

"Q. That is a common practice with all companies, is it not?

"A. Yes.

"Q. And whatever was done in this respect was done immediately after the close of the year, upon the final determination by the auditor of the entries to be made, is that not true?

"A. That is true, yes.

"Q. And the entries were made in 1930, not in 1940, isn't that true?

"A. That is true, that's right.

"Q. Long prior to the passage of the Natural Gas Act or the promulgation of the system of accounts of the Federal Power Commission in relation to natural gas companies?

"A. That is true, yes.

"Q. And in connection with the final closing of the books by the company in the usual practice of companies?

"A. This was in May of 1930.

"Q. That was the first auditing after the close of the year, was it not?

"A. That is true. . . .

. . . . . .

"Q. So the estimate for 1930 was made in May 1930?

"A. That is right.

. . . . . .

"Q. Now, on what authority, Mr. Vaught, did you feel justified in making these changes?

"A. I think on the authority of good accounting practice, and then, too, the system of accounts."

(Vol. 66, pp. 9535-9538.)

H. P. DAVIS, Secretary of the Company, testified on the subject in rebuttal:

"In Entry No. 201, page 2 of Exhibit No. 199, Mr. Vaught reclassifies General Overhead Expenses capital-

ized for 1929 and 1930 at that time. To support this reclassification, the witness stated without proof or demonstration that the allocations made by the company were arbitrary. No inquiry was made by him of the company officers, with respect to the entries in question.

"The construction of pipe lines amounting to approximately $1,500,000.00 involved a considerable amount of the time and facilities of the general office. No time records were kept during the construction period of the actual time devoted by management or by the clerical force, however, two new office employees were added in 1929 due to the press of work caused by construction activities. Neither the time of these employees nor others was charged to construction direct. Likewise none of the general office expense such as rent, telephone, stationery etc., was directly charged to construction. However, the question of the capitalization of a fraction of these items was not finally determined until early in 1930, at the time of the year-end audit when a study was made of the work involved up to the end of 1929. This study showed that a minimum of 25% of our major office and management costs should be allocated to construction, and charges based on that proportion were accordingly set up for 1929. For 1930, in which year there remained approximately as much construction work as in 1929, the same percentage was considered applicable. This percentage was applied to estimated expenses for 1930 and a monthly accrual set up. Mr. Vaught's analysis, (page 3, Exhibit 199) reflects that the actual expenses for the year 1930 amounted to $15,076.85 instead of the $13,380.00 estimate used by us in arriving at the monthly charge. While the actual items making up total expenses varied from the estimate, the aggregate was approximately $1700.00 greater than the estimate. We accordingly would have been entitled to apply our determined basis of 25% to this excess. We did not do this, however, but allowed the original charge to stand so that our 1930 accruals were actually 21.2% of the total instead of 25%. The total amounts so capitalized for 1929 and 1930 are $5714.74, and are entirely proper. See, page 42, paragraph (6) Overhead Construction Costs, Instruc-

tions—Gas Plant Accounts, Uniform System of Accounts, Natural Gas Companies, January 1, 1940, Federal Power Commission."

(Vol. 83, pp. 12,421-12,423.)

In *Entry 202, Exhibit 199,* the witness *Vaught* recommends for elimination all engineering fees paid to Henry L. Doherty & Co., under Management Contract of August 1, 1929 (Exhibit 106) in connection with construction in the years 1926 to 1937, inclusive, but chiefly in the years 1926, 1929 and 1930, in the amount of $82,792.57.

The reason therefor was the "affiliate" relationship between Colorado-Wyoming Company, Henry L. Doherty & Co., and Cities Service Company.

The statement of the witness *Vaught* is as follows:

"To adjust for 5% engineering fee on construction paid to H. L. Doherty and Company and Cities Service Company.

"A detail of 5% engineering fees capitalized is shown in the attached schedule. The total of such fees capitalized, according to the schedule, is $83,886.65. The balance in plant account as of December 3, 1939 is $82,792.57, the difference of $1,094.08 representing fees included in property retirements as recorded on the company's books.

"Payments of engineering fees have been made in accordance with the provisions of a fiscal agent agreement dated September 1, 1929 between Colorado-Wyoming Gas Company and Henry L. Doherty and Company. The terms and conditions of this contract are indicated to be the same as had been in effect between the parties prior to the date of the contract. A copy of the contract is attached.

"The books of account of the Colorado-Wyoming Gas Company and other data made available to the Examiner do not contain evidence that these fees represent any actual cost of the services from which the amount was paid."

(Exhibit 199, p. 4.)

The witness *Willard*, for the Company, eliminated these engineering charges in Exhibit 245 (above referred to), which revises Property Accounts as originally set forth in Exhibits 111, 117, 118. The elimination is also reflected in "Net Return" (Exhibit 248). See Appendix.

(Vol. 83, pp. 12,440-12,442.)

With the elimination of the 5% engineering charges the plant account of Colorado-Wyoming Company shows no charges or payments whatever for design and construction engineering. (Vol. 66, pp. 9541-9543.)

"On rebuttal, H. P. Davis, Secretary of the Company, testified as follows:"

"Included in entry No. 203, page 11, Exhibit 199 are miscellaneous expense items totaling $750.00 capitalized by the company but arbitrarily reclassified by Mr. Vaught. He charges these to expense on the ground that the vouchers from which the charges were made did not contain necessary supporting information. Mr. Vaught made no request for details supporting the entries as made by the company.

"Item No. 1 is a charge of $250.00 originating on our voucher No. 1454, covering expense of Mr. D. C. McCreery on trip to Kansas City May 5th, 1929. The purpose of this trip was to confer with some of our officials, who were at that time in Kansas City, regarding certain legal matters pertaining to construction work then in progress, and to discuss some of the details of the proposed terms of contract being prepared for the purchase of gas from Colorado Interstate Gas Company.

"Items No. 2, 3 and 4 are charges totaling $500.00 originating on our vouchers No. 1742, 1825 and 1923, covering reimbursement to Lee, Shaw & McCreery for payments made by them to Wm. I. Reilly in October, November and December, 1929 for special services in regard to pipe line work. During the latter part of 1929, persistent reports came to us of threats being made by persons in the Louisville-Lafayette district to blow up our pipe lines which at that time were in course of construction

through the heart of the coal mining area north of Denver. Officials of the company deemed it highly advisable to investigate these threats and accordingly the services of Mr. Reilly were engaged for this purpose. He was retained for a period of approximately ten weeks, during which time a close watch was kept over the pipe lines passing through this area. He also mingled with the various groups in this area from which trouble might be expected to arise in the effort to forestall any plots which might be in the making. About the middle of November 1929, construction having progressed to the stage where our lines were in the ditch and covered, and the agitation referred to having subsided, the services of Mr. Reilly were discontinued. This expenditure was a necessary and proper construction charge and properly capitalized. Entry No. 203 therefore is without justification. See, page 40, paragraph (8) Components of Construction Cost, Instructions Gas Plant Accounts, Uniform System of Accounts, Natural Gas Companies, January 1, 1940 Federal Power Commission."

(Vol. 83, pp. 12,419-12,421.)

By *Entry 204, Exhibit 199*, there was eliminated from Plant Account $2,844.90 "representing cash discount realized and retained by Cities Service Company on invoices (Note: aggregating $181,153.20) paid by it for the account of Colorado-Wyoming Gas Company in 1926," and further "that it represents capitalization of an inter-company profit on the books of Respondent."

The position of the Company as stated in letter to the witness *Vaught* was: "Their position (Cities Service Company) in the matter was that any reward for the prompt payment of bills in no way affected the price of goods covered by the invoice. Since the money was supplied by Cities Service Company, it was deemed proper that they should receive the benefits of any cash discounts." (Ex. 199, pp. 12, 13.)

However, this item was eliminated by the Company witness *Willard* in Exhibit 245, Revising Property Accounts as originally set forth in Exhibits 111, 117, 118, and was not reflected in "Net Return." (Exhibit 248.)

(Vol. 83, pp. 12,440-12,442.)

The witness *Vaught* in *Entries 205 and 206, Exhibit 199*, reverses and eliminates "Interest during Construction" as charged on the Company's books in the amount of $23,718.50, and sets up "interest during construction as recommended by the Examiner" in the amount of $14,978.74. (Ex. 199, p. 15.)

Vaught, on cross-examination, however, admitted an error in his computation of $1,165.78, which made the final determination by him $16,144.52, a net reduction of $7,573.98.

(Vol. 66, pp. 9596-9598; Vol. 68, pp. 9867, 9868.)

Interest during construction relates to the years 1925 to 1937, inclusive, except the years 1932 and 1933. The witness (Ex. 199, p. 16) sets forth a detailed schedule of computation, including "date to which interest re-computed by Examiner" as to various sections of main and lateral lines and compressor stations. The differences in result between *Vaught* and the Company are reflected in the rebuttal evidence in connection with Exhibit 243, given by Company witness WILLARD, the substance of which is as follows:

"The calculations in entry No. 206 arbitrarily assume that a main line goes into full service at the time service starts from a branch from that main line. The fallacy of this method can be pointed out by a hypothetical example. Assume a 20 inch line 200 miles in length was to be constructed, and a 4 inch lateral serving a small community at the half way point, was a part of the project. The theory used by Mr. Vaught would include interest during construction on the entire first 100 miles of 20" construction when the 4" line went into service. This obviously is harsh, inequitable and unfair.

"The calculations in this exhibit eliminate from interest charges the proportionate part of the investment in the main 10" and 8" lines from Littleton to Fort Collins as service begins on various laterals, prior to the date of connection and initial service of the 10" and 8" lines, to the already existing facilities of the north system at Fort Collins.

"Computations in the attached exhibit have been made

for interest during construction on the main 10" line from Littleton to Boulder Junction and the main 8" line from Boulder Junction to Fort Collins to the date of service to the north system at Fort Collins, January 31, 1930.

"To the amounts computed for these lines has been added the additional amount of $7614.58 which was obtained from Exhibit 199. This amount consists of the total of all interest during construction charges in entry 206 of that exhibit with the exception of the computations on the 10 inch and 8 inch line from Littleton to Fort Collins.

"The total interest during construction thus computed results in the total amount of $23,690.27. The actual book figure is $23,718.50. It is believed that the total actual book charges should be allowed and that Entries number 205 and 206 of Exhibit 199 be disregarded."

Q. Now turning to your Exhibit 242, Mr. Davis, Page—it doesn't have a page number on it. It is included in Entry 203, Page 11.

A. All right.

Q. Does your copy of the exhibit have a number on it?

A. No, it doesn't. This statement was made up in sections and wasn't properly numbered.

Mr. McCreery: It is actually the fourth page of the exhibit.

By Mr. Lange:

Q. You there refer to Entry No. 203 of the Commission's Exhibit 199 as to the miscellaneous expense item totaling $750 capitalized by the company but which you state arbitrarily is reclassified by Mr. Vaught. What do you mean by that statement, Mr. Davis?

A. I mean there was nothing there by which I could do other than leave it where it was unless it was arbitrary.

Q. Well, you mean that if any change in classification was made, any reclassification was made, it would automatically be arbitrary?

A. I would say so in the absence of anything to prove the original classification was wrong.

Q. There again you state Mr. Vaught made no request for any details supporting these entries. How did you know—

If another request was made on you, how did you know whether he made any requests of others for information?

A. Well, I would say that if he made requests from others he didn't go far enough with his request. He should have come to me.

Q. What about Mr. Hurdle? Wasn't there a lot of information given by him in response to requests of Commission's staff?

A. He undoubtedly made an effort to supply all of the information he could, but I am sure in something like this he couldn't have taken it upon himself to supply information not available to him.

Q. What is Mr. Hurdle's status?

A. He is my assistant. He is now the Treasurer of the company.

Q. If Mr. Vaught or anyone else on the Commission's staff had made a request for any information on that particular item of someone else, you don't attempt to say here such request was not made?

A. No, I wouldn't say that he hadn't asked someone. He might have gone out and asked the janitor, for all I know, but he didn't ask me.

Q. He didn't ask you?

A. If he had, I would have tried to obtain the information.

Q. But all requests for information were not directed to you by the Commission's staff, were they?

A. No, and as I said before, all of us answered as many questions as we could orally, and questions that we couldn't answer we could obtain the details on, we did do that then or later. I can't find that Mr. Vaught ever requested any information regarding these items.

Q. Turn to Page 2, Exhibit 242. It is marked "2" but it has on it as the second paragraph "Entry No. 201".

A. All right.

Q. On Page 2 of Exhibit 199 you there refer to reclassification of general overhead expenses capitalized for 1929 and 1930. You state further: "To support this reclassifi-

cation, the witness stated without proof or demonstration that the allocations made by the company were arbitrary."

Now, there again you state the conclusion that those reclassifications by Mr. Vaught were arbitrary?

A. No, I didn't say he was arbitrary.

Q. I mean you.

A. He states we were.

Q. You mean you state that because the company reclassified them they should not be considered as arbitrary?

A. Mr. Vaught stated that the company's classification was arbitrary.

Q. What is your position with reference to Mr. Vaught taking that position?

A. He brings out nothing to demonstrate it was arbitrary on our part. That is what I meant to say.

Q. As I understand it, you are not accusing Mr. Vaught of being arbitrary?

A. He is accusing us.

Q. It is on the other foot at this time?

A. That is right.

Mr. McCreery: He stated on his cross examination it was arbitrary, Mr. Lange.

By Mr. Lange:

Q. Now, going to Page 3, Exhibit 199—

Mr. McCreery: Please state the following page instead of referring to it as Page 3.

Mr. Lange: I have reference to Exhibit 199.

Mr. McCreery: I beg your pardon.

By Mr. Lange:

Q. Does Page 3, Exhibit 199, truly reflect what appeared on the company's books?

A. I believe it does.

Q. How did the company proceed in setting that up?

A. Just as stated there, that a study was made of the volume of work and the result of that study showed a minimum of 25 per cent of our general office activities were devoted to construction.

Q. Who made that study?

A. The traveling auditor. I am trying to think of his name.

Q. Mr. Taylor?

A. No, it doesn't seem like it was him. I really can't say now.

Q. What year was it made?

A. 1930.

Q. 1930?

A. Yes.

Q. What part of the year?

A. It was mid-year or a little later.

Mr. McCreery: May I interpose one question here?

Mr. Lange: Yes.

Mr. McCreery: This study was made by this traveling auditor and yourself?

The Witness: It was made by the traveling auditor and myself. It was a joint study.

By Mr. Lange:

Q. Was it prepared by you or the two of you together?

A. Largely by him with my assistance in giving him what information I could.

Q. Did you draft the report? Did you put it in final form before you determined the making of these entries?

A. I think we did, yes.

Q. What became of that study?

A. He probably presented it to his superior, the auditing *dividion* in New York City.

Q. You don't have it, do you?

A. No, I wouldn't have it.

Q. Didn't you participate in the preparation of it?

A. Yes, I assisted all I could and furnished him with the information he wouldn't ordinarily have from the records.

Q. And that study was furnished to Mr. Vaught?

A. Oh, no. Mr. Vaught didn't ask for it and it wasn't available had he asked for it.

Q. It wasn't available?

A. No.

Q. Of course, you knew it was pertinent, had it been available?

A. Well, I wouldn't say it was particularly pertinent.

Q. Why not?

A. It was a matter that had been studied and arrived at and adopted by the management as being proper.

Q. In other words, after these items had appeared on the company's books, later on it was determined after a study was made, that a definite change should be made that on its face would determine that such change was a correct one, and you wouldn't have to refer anybody to that study?

In other words, those items were on the company's books and at a later time a study was made, isn't that true?

A. Well—

Q. If it isn't, what are the facts?

A. Let me state it this way: While we were engaged in this construction work we were likewise operating the company. The same parties were participating in both activities. Naturally we were quite busy. We didn't attempt to keep a log book or a diary and a time sheet and what-not as we went along. We were busy with other things. After certain portions of this time had expired we sat down and reviewed the thing. Of course, our figures were largely from memory because as I say, we had nothing in writing.

Q. You state in the written statement: "No records were kept the time actually devoted by the management or the actual clerical force."

A. That is right.

Q. There wasn't any of that available? You and this auditor sat down in 1930 and decided on this study?

A. That is right.

Mr. McCreery: In 1930? It was in 1930 but the audit was for the year 1929?

Mr. Lange: That is right, but this study was made in 1930.

Q. At that time you and this company's auditor arrived at these percentages set forth on Page 3, Exhibit 199?

A. Yes.

Q. And you think that Mr. Vaught should not have criticised the percentages as set up by the company there as being arbitrary? What support did you give him for those percentages?

A. He asked for no support. I might say there would be no other method of arriving at a figure after the business was transacted without records to go on other than on a percentage basis.

Q. I will agree with you as there would have to be a percentage basis if you had no time records or anything, but that percentage may be anywhere from one to one hundred.

A. That is the way we analyzed it at that time and the percentage we arrived at as the result of our cogitations.

Q. Can you give just an index of how you arrived at 25 per cent of those items appearing at Page 3, Exhibit 199, for the year 1929? You have that whole group of items that you applied 25 per cent to.

A. Well, probably our study showed a minimum of 25 per cent of our activity was in connection with construction activity. We accordingly applied that percentage to the various general overheads there which were concerned.

Q. Did you have to get some basic starting point to make those apportionments or percentages? Having no time records or other data of that sort on which to predicate the figures, you had to do that, did you not?

A. I can't say now other than that we determined a minimum of 25 per cent of our activity was spent on construction work.

Mr. McCreery: That is, time spent in your office?

The Witness: Our general office was occupied no less than 25 per cent on construction.

By Mr. Lange:

Q. You just applied that round percentage to each of the items set forth there, salaries, legal fees, traveling expenses, office supplies, and rent? You applied 25 per cent as being applicable to every one of them?

A. I would say so, yes.

Q. The same percentage?

A. Yes. It was our overhead cost of conducting the office.

Mr. McCreery: This determination was made while the construction was actually in progress?

The Witness: While it was still under way.

By Mr. Lange:

Q. But the items that have been previously expensed on the company's books, had there been anything on the books at all to give you any guide?

A. I couldn't say that definitely.

Q. You just had to sit down and determine without any records the percentage that you determined to be applicable for each item to be capitalized?

A. No, not for each item.

Q. For those certain items set forth on Page 3 there?

A. We knew what our total general office overhead was and we determined the proportion of activity that the general office participated in the general construction work.

Q. What became of the necessary records that enabled you to make those percentage determinations? Did the company keep any records in those years?

A. No.

Q. You did not? Didn't they keep them in any place at all, either here or New York?

A. I wouldn't know.

The Trial Examiner: Mr. Davis, did you say the traveling auditor arrived at this figure at the time he was out here?

The Witness: Yes.

The Trial Examiner: You didn't capitalize it at that time?

The Witness: We set up an entry capitalizing $2,549.74 for 1929 and we adopted this same percentage to apply to 1930 as general overhead and accrued that over a month-to-month—on a monthly basis.

The Trial Examiner: It was set up following the conclusions reached by you and the traveling auditor?

The Witness: That is right. At the end of 1930 the actual general overhead amounted to a little more money than we had originally estimated and upon which we based our monthly accrual. We didn't go back and change our accrual to pick up that excess. We just allowed it to stand at the original amount.

By Mr. Lange:

Q. For the year 1930 you proceeded in making estimates both ways. First of all you estimated the expense items as set forth in that list and then you estimated the percentage. You had two estimates to make. First you estimated the amount and then you had to determine the percentage, isn't that true?

A. We applied the percentage we used previously.

Q. It was still an estimate. Here you had an estimate both as to amount, as well as to percentage in 1930?

A. That is true, but later results showed we were modest in our estimate rather than otherwise.

Q. You mean in the amount or in the percentage?

A. In the amount and percentage both.

Q. On the upper part of Page 3, Exhibit 199, I notice there are varying percentages that are based upon actual—it is 46.8 and 20.1 and 6.8 and 17.99, and even if you disregarded that extreme one on traveling expenses, the others are not at all—

Mr. McCreery: Those percentages are Mr. Vaught's, Mr. Lange. They are not the company's figures.

The Witness: He applied our actual accruals.

By Mr. Lange:

Q. That is the way it actually worked out?

A. That is the way it worked out. The amount we accrued was only 21.2 per cent of our total overhead expense.

Q. That is right. That is the total—

A. Whereas, we set out to capitalize 25 per cent of our overhead, so we really undercharged ourselves.

Q. On general traveling expense you set up 15 per cent in your estimate for 1930, didn't you?

A. Yes.

Q. But there isn't any question about it as to the year 1930, you have both estimates of the amounts as well as an estimate of it in percentage?

A. Yes.

Mr. McCreery: Isn't that the way you do in the current year, constantly make estimates and accruals from month to month based upon the expected expense to be incurred?

The Witness: That is right.

By Mr. Lange:

Q. I see you attempt to predicate your position on some provisions of the Uniform System of Accounts. I refer you to Page 42, Paragraph 6, construction costs. Will you turn to that, Mr. Davis?

A. Yes.

Q. You have turned to Paragraph 6, overhead construction cost?

A. Yes.

Q. Paragraph A refers to overhead construction cost, and so forth. Paragraph B states: "The instructions contained herein shall not be interpreted as permitting the addition to gas plant accounts of arbitrary percentages or amounts to cover assumed overhead costs, but as requiring the assignment to particular jobs and accounts of actual and reasonable overhead costs."

Is that the paragraph you cite?

A. I referred to Paragraph A.

Q. All right.

A. It gives you a little more *leaway* than Paragraph B does.

Q. Where does Paragraph A permit you to make any percentage calculations like you attempted to justify?

A. It doesn't mention percentage. It doesn't stipulate how you will arrive at it.

Mr. McCreery: Read the paragraph, Mr. Davis.

The Witness: "All overhead construction costs, such as engineering, supervision, general office salaries and expenses, construction engineering and supervision by others than the accounting utility, law expenses, insurance, injuries and damages, relief and pensions, taxes, and interest, shall be charged to particular jobs or units on the basis of the amounts of such overheads reasonably applicable thereto, to the end that each job or unit shall bear its equitable proportion of such costs and that the entire cost of the unit, both direct and overhead, shall be deducted from the gas plant accounts at the time the unit of property is retired."

That is what we set out to do.

Mr. McCreery: You don't base it on the Uniform System of Accounts but it is a recognized system of accounts followed by this company back in 1930?

The Witness: That is right.

By Mr. Lange:

Q. You don't believe in the second paragraph with reference to computing percentages?

Mr. McCreery: I think it is applicable that you are assuming it is an arbitrary percentage. The paragraph permits percentages but they shall not be applicable.

Mr. Lange: I wanted this witness' contention—

Mr. McCreery: I wanted to clear the record, as you were distorting the meaning of that paragraph.

Mr. Lange: I am just reading the paragraph as it is and the Commission will determine what it means.

Q. Is that what you are relying upon, Mr. Davis, this particular item that justifies the making of the percentages as you and this auditor made?

Mr. McCreery: It isn't the justification. It is an illustration. He doesn't say he used it as an authority, because this system was not in operation at the time these entries were made in 1930.

Mr. Lange: I want to know whether he believes that this section of the Uniform System of Accounts sanctions a proceeding as he has outlined it.

The Trial Examiner: Which section is that, Mr. Lange?

Mr. Lange: Section 6, any portion of it.

The Witness: I would say Paragraph A very clearly does.

By Mr. Lange:

Q. I read Paragraph B. There is another paragraph, Paragraph C. Are you in accord with Paragraph C of the same section? It states: "The records supporting the entries for overhead construction costs shall be so kept as to

show the total amount of each overhead for each year, the nature and amount of each overhead expenditure charged to each construction work order and to each gas plant account, and the bases of distribution of such costs."

A. I think we complied with that.

Q. You mean after you made—

A. I think our statement is outlined here and shows our bases.

Q. After you arrived at your own bases, you were satisfied with what you did?

A. Yes, we feel it is reasonable and fair.

The Trial Examiner: We will stand in recess until 2:00 o'clock this afternoon.

(Whereupon, at 12:30 o'clock, p. m., a recess was taken until 2:00 o'clock, p. m., of the same day.)

Afternoon Session, 2:00 P. M.

The Trial Examiner: The hearing will be in order.

Whereupon—H. P. Davis, the witness on the stand at the time of recess, having been previously duly sworn, resumed the stand and testified further as follows:

Cross Examination (Continued).

By Mr. Lange:

Q. Mr. Davis, at the noon recess we were on Entry 201 of Exhibit 199 discussed by you at Pages 2 and 3 of your written statement, Exhibit 242, and request was made for a transfer voucher which we *watned* to have available at this hearing. Did you find that voucher, TV894?

A. Yes.

Q. Do you have that voucher?

A. I have a pencil copy here that was taken from it.

Q. Will you read that into the record? What does it show?

A. The explanation on it is, "Auditor's Adjustment Entry to correct distribution on vouchers Nos. 1309, $111.55; No. 1328, $25.10; No. 1350, $145.15; No. 1370, $101.72; No. 1421, $159.80. These amounts charged to general traveling expense should have been construction expense."

Q. And what do those items consist of?

A. What do you mean?

Q. These adjustments reflected by this transfer voucher. Do you have a breakdown of them?

A. No; there is no breakdown other than these voucher reference numbers which is redistributing a certain amount of traveling expenses through plant account.

Q. In what year were they expensed? What is the date of that?

A. The date of the transfer voucher is May 16, 1930.

Q. May 16, 1930?

A. Yes.

Q. When were those items expensed by the company?

A. They were quite likely 1929 because the audit period was as of December 31st.

Q. Now, turning to Exhibit 199, Page 3, the item "General Traveling Expenses for the year 1929," actual, in Column 2, $1285.32, doesn't that $1285.32 include these adjusted items?

A. Well, I couldn't say for sure but I don't believe it does

Q. They were originally charged to expense, weren't they?

A. Yes.

Q. Well, why?

A. Well, I presume that these were items which were definitely assignable to construction, while on this other the balance that we are allocating to construction—the balance of our general traveling expense—

Q. Well, isn't it a fact that the item of $1285.32, general traveling expenses, actual, 1929, is the total of those expenses for the year 1929 as per books?

A. I couldn't say. Mr. Vaught has them set out here. I presume he means them to be the total.

Q. You have had occasion to check those, aren't they in fact correct as presenting the actual expenses per books, general traveling expenses, for the year 1929?

A. Quite likely they are. I haven't checked it.

Q. And you still say that these adjusted items are not included in that total of $1285.32 that were expensed?

A. I wouldn't say.

Q. In other words, they amount to $535.32?

A. Well, I haven't checked them.

Q. If they were you would have a duplication to that extent, wouldn't you?

A. Well, I wouldn't say that it would necessarily be a duplication. This statement over Page 3 is allocating in a general way the total overhead expenses for the year exclusive of any item which may have been redistributed in some other manner.

Q. Well, there is no question but that the $1285.32 is all inclusive, includes the entire amounts?

A. It probably does.

Q. Well, if that is a fact, then there is bound to be duplications, of course. Then you apply this 25 per cent—this percentage of 25, to the total, don't you?

A. Yes. That is the way we have built up to get our total. We applied the 25 per cent really to the total general overhead, item by item.

Q. Now let's go to the next entry, Page 3. That is Entry No. 212, Exhibit 199, Page 22 of the exhibit. That covers a reclassification of cost of facilities installed to serve the International Metal Foundation. What is your criticism with reference to Mr. Vaught's treatment of that?

A. None, except that it was a little premature.

Q. Well, Mr. Vaught's treatment is as of December 31, 1939, isn't it?

A. I think that it is.

Q. Well at that time in the light of the knowledge of that date, he correctly treated it, didn't he?

A. That was the condition at the moment. Now, I am calling attention to a different condition which has come about.

Q. All right, but you don't say that his treatment at December 31, 1939 may not have been correct, but the conditions have changed, and you say it should now be voided in its entirety. Of course, you didn't pursue the matter correctly.

A. Well, what I meant to convey was that the condition now is that it should be plant in service.

Q. In other words, wasn't there a retirement made of that property as late as 1941?

A. You will notice here in my comments that our pipe line and measuring facilities are being placed in readiness

to commence service so that any retirements made are being restored—

Q. So that Mr. Vaught's entry as of December 31, 1939 reflected the correct situation but since that time there has been a change in actual conditions?

A. That's it. All I want to do now is to restore that to plant in service. He was correct at the moment.

Q. And what is the date that it goes back into service?

A. Well, most any time now. We are just waiting for the people who occupy the building to complete their piping and connect to our metering box.

Q. It hasn't actually been connected up?

A. No, they are working on it now, as fast as they can.

Q. And is that service to be rendered under a new contract?

A. Yes. It has been tendered to them. That is a formal contract subject to acceptance.

Q. It has not been closed yet?

A. It has not been officially signed, but they are going ahead and making the expenditure on their pipe, for piping the building there and buying appliances.

Mr. McCreery: The company also is making expenditures at the present time?

The Witness: Yes.

By Mr. Lange:

Q. Now, this entry—

The Trial Examiner: I wonder, Mr. Lange, on this item which you have just discussed, if we might not—if counsel might not agree to perhaps submit some information later as to when this line actually goes into service so that it might become part of the record in these proceedings.

Mr. McCreery: We'll be very glad to do that.

Mr. Lange: Yes.

The Trial Examiner: When the service is entered.

Mr. McCreery: Of course we are spending money now as the customer is, but you mean when the actual flow of gas starts?

The Trial Examiner: Yes.

Mr. Lange: When the gas is being served. I think a copy of such contract ought to accompany that statement, what contract is entered into.

Mr. McCreery: I don't know what the purpose of cluttering up this record with that contract is. The service is all we are interested in.

The Witness: The contract will no doubt be filed at Washington.

The Trial Examiner: The contract undoubtedly will be filed at Washington?

Mr. Lange: Except unless it is referred to by reference it won't be in the record.

Mr. McCreery: I don't see what place it has in the record. I have no objection except it clutters up the record.

Mr. Lange: We don't know the nature of the service and we ought to have the opportunity to determine it.

The Trial Examiner: Let us do this, Mr. Lange: Let it be understood that the information which I just suggested will come forward and be made a part of the record and then in the event Commission's counsel, after viewing the contract, desire to incorporate in the record, perhaps we might make some further arangements at that time.

Mr. McCreery: I have no real objection except that it clutters up the record.

The Trial Examiner: That's just the point.

Mr. McCreery: We'll submit the contract along with the date of service, and it isn't important enough to raise an objection over.

Mr. Lange: And give the exact date when service commences.

Mr. McCreery. Yes. That will be sent in formally. We will just submit it to the Examiner and let him incorporate it in the record and send a copy to you, if that is satisfactory.

The Trial Examiner: Very well.

Mr. Lange: Yes.

Q. On this Entry No. 208, at the bottom of Page 3 and over on Page 4, that $375 item covering service or information with reference to the geological matters—or what does that—

A. It covers a complete report on the Berthoud field as it existed at that time, and the possibilities in the way of production.

Mr. McCreery: You are referring now to Entry No. 208, Mr. Lange?

Mr. Lange: Yes.

Q. Now, how had that item—the total of that item is $750, wasn't it?

A. Yes.

Q. And you have stated on Page 4 that that was a pre-construction cost; that is, the $750.

Mr. McCreery: In respect to the Greeley branch line.

Mr. Lange: Yes.

Q. Why did you come to that conclusion?

A. I can't see what other conclusion you could arrive at. It is definitely in connection with proposed construction.

Q. The whole $750, then, in your opinion, is to be capitalized?

A. It could properly have been capitalized, yes.

Q. Why was half of it expensed by the company?

A. I can't say at this time why we only capitalized half of it.

Q. Don't you have any opinion about it?

A. No, I don't know that I could express one at the moment.

Q. In other words, it is a total that isn't very readily divisible? I mean, it covered one certain thing and—

A. Probably what the influence was, our undestanding then when this expenditure was authorized, was that the City of Greeley would stand one-half of the expense. They later failed to do that and we absorbed it ourselves as construction cost.

Q. And that is your opinion of why?

A. That is my recollection of the transaction.

Q. Now, in your Entry No. 114, having to do with the—

Mr. McCreery: That entry relates to Exhibit 202?

Mr. Lange: Yes.

Q. Exhibit 202 of Mr. Smith, referred to on Pages 4 and 5 of your Exhibit 242, what does that item cover?

A. Well, just as I state here, it covers a quite extensive report on the oil and gas field activities in this area.

Q. Is that still being incurred every year?

A. Yes, sir.

Q. It tends to cover matters of production of gas, or the geology of gas, or what?

A. The exploration for new finds in the field and the progress of wells in the various "Wild Cat" territories and likewise in wells that have been brought in, if they are important enough to keep a record on.

Q. It covers both oil and gas, I suppose?

A. Well, they usually go together so we get a combined report.

Q. And you say this report is valuable only to the Colorado-Wyoming Gas Company. Now, in what respect is it valuable to the Colorado-Wyoming Gas Company?

A. Well, I think I stated it here, it enables us to keep abreast of developments in the exploration and discovery of gas and we can take such discoveries into effect in the conduct of our own business. In other words, an important discovery of gas in our immediate vicinity would have quite a bearing on our rates and our business in general.

Q. Oh, it would?

A. Yes.

Q. In other words, if you had a supply of gas that you discovered somewhere around in this area, then you would sever your connections with Colorado Interstate?

A. Not necessarily.

Mr. McCreery: The contract covers that.

Mr. Lange: I believe there is such a clause permitting that procedure.

Q. How long is this $300 item—how long has it been incurred? Over what period of years?

A. I would say probably five or six years at least.

Q. As I understand it, it isn't just utilized exclusively for Colorado-Wyoming but Mr. Hancock in his work uses it in connection with the other companies?

Mr. McCreery: Now, just a minute. The statement is just the opposite of what you are stating.

Mr. Lange: Withdraw that.

Q. I understand that the service goes to Mr. Hancock. He is the one that gets the use of that particular service?

A. No.

Q. Well, if not, who does?

A. We get it ourselves and we furnish him a copy. He is naturally interested in developments in our territory.

Q. It goes to you first and then you furnish him a copy?

A. We send him a copy.

Q. And he gets that copy regularly, doesn't he?

A. Yes.

Q. All right, what use does he make of that?

A. I couldn't see that he makes any other use than just to keep in step with the conditions as they are out here. It would have absolutely no value to him in connection with our other properties.

Q. Well, how do you know it wouldn't?

A. Well, use your own head on that. You can figure that yourself.

Q. You say in here to what it is limited, that information. I don't know what Mr. Hancock's activities are.

The Trial Examiner: He said the report was confined to Colorado and Southern Wyoming.

Mr. Lange: That is just what I was getting at. That covers quite a large volume of operations.

The Witness: Well, only a field large enough to affect us in our direct operations here. That's all we're concerned with.

By Mr. Lange:

Q. Well, what about the operations of the Cheyenne Light & Fuel Company in Wyoming?

A. That's us. Colorado-Wyoming—we sell gas to Cheyenne.

Q. Oh, yes. Well, Cheyenne isn't paying any part of this $300?

A. Why should they? It is not their concern, it's Colorado-Wyoming's concern.

Q. You just said in the first breath that you are the same ones.

A. Don't we sell at Cheyenne?

Q. That's right.

A. All right, that's us.

Q. All I am interested in is who is paying the $300.

A. We are, and the distribution company at Cheyenne doesn't give a hoot what we do. It is not concerned with our gas service and gas supplies other than that they want a firm supply of gas to serve their customers.

Q. All right, Mr. Hancock is interested in the Cheyenne Light, Fuel & Power Company, isn't he?

A. I think not. He has no contact with the distribution companies.

Q. He wouldn't even be remotely interested in it?

Mr. McCreery: I object. This is far far afield. There are some limits to this, and after all, the management certainly has some rights in the matter of what it will do, and it seems to me that cross examination is out of line.

Mr. Lange: I have one question to ask further on that with reference to Cheyenne.

The Trial Examiner: Very well.

By Mr. Lange:

Q. If the Cheyenne Light, Fuel & Power Company were able to get gas close by Cheyenne, wouldn't that be of particular interest to them?

A. Well, they probably would be interested in a nearer supply, but the matter would come back to us eventually because we have a firm contract with them.

Q. Oh, you do?

A. We think we do.

Mr. McCreery: The contract is in the record.

By Mr. Lange:

Q. So, even if they were to have a discovery of a field near Cheyenne, that wouldn't be of any benefit to the Cheyenne company?

A. I don't think that would warrant them in violating their contract and going out and contracting for a new supply.

The Trial Examiner: Who publishes that service?

The Witness: It is an individual here, Chester Harper. He renders reports to various companies around in Denver who are interested.

By Mr. Lange.

Q. On Page 5 you have another entry, 115, that covers Exhibit 202 with reference to the computation of capital stock taxes. What's your basis of criticism of that, Mr. Davis?

A. Well, my criticism was that Mr. Smith ignores the requirements of this tax. He sets up a basis here that he feels is the one that you would like to pay on, not the one that you are required to pay on.

Q. Well, on what basis are you figuring the computation?

A. On our declared value.

Q. All right, now, supposing you proceed as you say.

A. Had we set the book value of our stock issue at one dollar per share, the company stock tax computed on Mr. Smith's formula would then amount to only $88, whereas, if we had fixed the stated value of $60 per share the tax would amount to $303.

Q. How could you fix the $60 per share stated value?

A. The same way we fixed it as it now stands.

Q. Can you fix the stated value at $60 without the investment in property being there to cover that amount?

A. Oh, yes. The directors have the privilege of putting any stated value they wish on the stock.

Q. Put any value on it they want to?

A. Yes.

Q. And you would fix a stated value of $60 a share?

A. No, I just used that for a basis there, I could have picked and other—75 or 100 or what-not.

Q. Well, you would have to have a different number of shares, wouldn't you?

A. Not necessarily.

Q. Well, then, how would you make your books balance on your assets side if you used a different figure for your stated value? In fact, how would you proceed?

A. The same way we got a balance with the figure we did use.

Q. In what year did you use that?

A. 1931, I believe.

Q. 1931?

A. Yes.

Mr. McCreery: I think you will find it is a later year if you will look at your state ent.

The Witness: I think the capitalization was taken in 1931.

Mr. McCreery: I thought he meant what year did you use this particular figure.

By Mr. Lange:

Q. Yes, what year did you use them?

A. You mean the recapitalization?

Q. Yes.

A. I believe it was in 1931.

Q. 1931?

A. Yes.

Q. You had 50,000 shares, didn't you, you say, you set up at $60 a share?

A. No, they were set up at $33-1/3 per share.

Q. Yes, but supposing you set them up as you state in your written statement on Page 5, at $60 a share. That would be 3 million dollars, wouldn't it?

A. Yes, sir.

Q. All right, you say that you are privileged to fix the stated value at any amount you want to. Suppose you had a 3 million dollar total like this. Where are your assets to cover that figure?

A. Presumably you have got cash for them or some other consideration.

Q. Well, then, there isn't any difference between you

and Mr. Smith on his computation, Page 2 of the exhibit, is there?

A. No. I take exception to his making any computation there. Why doesn't he take the computation that we filed. That's what's the matter with it.

Q. You say on Page 6 that the stock could have commanded an actual market value at $50 per share. Why do you set a higher declared value than the actual one on your stock?

A. I didn't.

Q. You didn't?

A. We set a declared value on the business.

Q. On the business?

A. The worth of the business.

Q. Well, that is higher than the book value of the stock.

A. Well, I'd hope so. We haven't capitalized to the full limit there. A million and a half dollars doesn't represent the cost of our property by any means.

Q. And you have made a stated value for that amount every year for what period?

A. I think our last declared value was 1939.

Q. And at what rate was that?

A. $2,200,000, I believe.

Q. Well, setting it at that point avoids the payment of any excess profit tax. That's the real result of it, isn't it?

A. That's one of the results, yes.

Q. What other results are there?

A. The other result is that we more nearly reflect the book worth of the plant than the stock issue would indicate.

Q. What was your outstanding stock for that year. 1939?

A. 1939?

Q. Yes.

A. 50,000 shares.

Q. Well, doesn't that represent all the money that the stockholders have in the business?

A. It represents the original investment in buying their stock, yes.

Q. And what is the par value of that stock—no par?

A. No par.

Q. That is as of December 31st, 1937 your capital stock account showed $1,501,000, didn't it?

A. Yes.

Q. And let's see, that is as of December 31st, 1937. That is still the same, isn't it?

A. That's right.

Q. And there isn't any other money that the stockholders have in the company, is there?

A. That represents their invested money.

Q. In the business?

A. Yes. That is the stated value of their stock that was issued to them for the investment they made.

Q. No bond money outstanding?

A. That one million doesn't mean that that is their total investment, that is the book stated value of the stock that was issued in return for the investment made by them.

Q. Well, what other investment is there that they have in the business?

A. A plant which has a book value of $1,900,000, approximately.

Q. And I was just asking you, there is no outstanding bond or no outstanding bonds, are there?

A. No.

Q. Well, in addition to that amount, was there any money put in by the stockholders over and above $1,501,000?

Mr. McCreery: It is immaterial who put in the money. I object to the question. It has no relation to this issue.

Mr. Lange: Well, this witness is particularly well versed in this company's financial setup, its method of computing its taxes, and we are entitled to know.

Mr. McCreery: It is immaterial.

Mr. Lange: We are entitled to know what the capital structure is.

Mr. McCreery: My objection is it is immaterial. The question you asked is immaterial with reference to this capital stock return.

Mr. Lange: I don't think it is. I think it is relevant to a determination of the proper computation.

Mr. McCreery: I am just making my objections, is all.

The Trial Examiner: The witness may answer.

Mr. Lange: Read the question.

(The question referred to was read by the reporter as set forth above.)

The Witness: Yes.

By Mr. Lange:

Q. What was it?

A. Some $400,000.

Q. By whom?

A. By the stockholders. We didn't get $1,800,000 plant out of thin air.

Q. Where is that $400,000 reflected?

A. In various book entries there which Mr. Smith is very familiar with.

Q. Have you got your revised balance sheet in Exhibit 242 before you? Now, where is it there reflected in your balance sheet as of December 31, 1940?

A. Under "Utility Plant." Total of $1,899,997.94.

Q. Where on your balance sheet at December 31, 1940—common capital stock under "Liability and Other Credits," does it show that the stockholders invested any more than $1,501,000?

A. From that account, no, but that account could be $1 just as easy as $1,501,000.

Q. Going back to the balance sheet again, supposing that common capital stock that is set up there as $1,501,000 were just $1 as you say. Where would the balance of it be reflected?

A. You would probably have a large sum down in surplus.

Q. All right, where do you show that on this table?

A. We don't because we have $1,501,000 set up there.

Q. Those are the only two places where it would appear, either one or the other, wouldn't it?

A. If we had it on at $1, we could, but we don't have it on at $1.

Q. On that same balance sheet where you have the depreciation reserve set up for gas plant at $512,122.40, where is that? Isn't that $512,122.40 invested in your gas plant?

A. I wouldn't know whether it was invested in that.

That item there is simply a liability of the company. The money could be anywhere.

Q. You have got it in your liabilities and other credits, I know, but is that set up here as an item that the company is obligated to pay?

A. It is a liability which may arise to call for cash expenditures at some future time.

Mr. Lange: Mr. Examiner, I wonder if we can have a few minutes recess?

The Trial Examiner: Very well.

(At this point a short recess was taken, after which proceedings were resumed as follows:)

The Trial Examiner: The hearing will be in order.

By Mr. Lange:

Q. Turn to your exhibit 242, Entry 117. That covers an item of the annual charge for the State of Delaware Corporation License?

A. Yes.

Q. What license does the company pay in the state of Colorado? Is it the same?

A. They pay a privilege tax in Colorado for the privilege of doing business here based on our investment in the state.

Q. Do you know what amount that is? Is it the same amount?

A. Well, it is variable according to—as your investment varies.

Q. Do you know whether it was around this amount or about $147.19 in 1939?

A. Yes.

Q. Thereabouts.

A. Yes, roughly.

Q. Around there.

A. Yes.

Q. Well, Mr. Smith, as I understand it, took the position in his working capital study—I mean in his exhibit 202, that the amount paid the State of Delaware was a similar amount, or almost similar to the amount paid in Col-

orado that was a tax really attributable to the rate payers twice, isn't it, for the same character of service?

A. It is not the same tax.

Q. In other words, if the company were organized in the State of Colorado and chartered here where it is doing business, there wouldn't be any tax payable in Delaware?

Mr. McCreery: I object. It is wholly immaterial. This happens to be a Delaware corporation, and the question is not responsive to any fact presented in this record.

Mr. Lange: Why, Mr. Davis is criticising the treatment of it in Exhibit 202.

Mr. McCreery: I am objecting to your question. I am not objecting to his criticism.

Mr. Lange: All right, Mr. Davis states this: "I refer now to Entry No. 117, representing annual charge of the state of Delaware for corporation license. This Mr. Smith states is not an allowable operating expense on the ground that a tax of approximately an equal amount is paid to the state of Colorado and is therefore a duplicate charge."

Q. Now what is your criticism of that?

A. Because it is not the same tax.

Q. Isn't that the same tax?

A. They aren't paying it twice for the same purpose.

Q. Well, isn't it paying it twice for the same purpose in effect?

A. No, as I stated, we are a Delaware corporation. We pay a tax for that purpose. We obtained our charter and we pay the State of Colorado a privilege tax for investment of our money here.

Q. Yes, and I was asking you the question whether the Colorado-Wyoming Gas Company, if incorporated under the laws of the State of Colorado where it is doing business whether it would in that event have to pay the Delaware tax?

A. If we weren't incorporated in Delaware, naturally we wouldn't have to pay a Delaware tax.

Q. All right, what service is there to the rate payers on the Colorado-Wyoming line because they are incorporated under the laws of the State of Delaware?

A. I might put it to you this way for the sake of argument: Supposing our lines ran through the State of Kansas but we had no customers there but we were forced to pay the State of Kansas tax on our properties in the state, the fact that we had no customers in Kansas, would we be justified in charging them to the customers in Colorado?

Q. No, I don't think that would be a similar situation, because your line would necessarily have to run through the state, as you put the hypothetical proposition, but your company has all its facilities in the states of Colorado and in Wyoming.

A. Yes, but it so happens that Wyoming does not charge any tax for that purpose.

Q. Well, if the State of Wyoming charged one, you would be properly paying it. It would be necessarily an essential cost in the operation of the physical properties.

A. Mr. Smith doesn't infer that in his entry. He talks as though only one tax would be permissable.

Q. Of course, that is your interpretation of it.

Mr. McCreery: I object to this. The witness has stated his reasons and this is simply resulting in an argument with the witness as to his view.

The Trial Examiner: It seems to me it is getting rather argumentative, Mr. Lange. However, Mr. Davis, isn't this tax in Colorado a tax on the foreign corporation for doing business in the state of Colorado?

The Witness: It is a tax on investment.

The Trial Examiner: For a foreign corporation?

The Witness: That's right. That's one of the requirements to do business in the state of Colorado.

Mr. McCreery: By a foreign corporation.

The Witness: That's right.

By Mr. Lange:

Q. Just one more question right along that very subject. If the Colorado-Wyoming Gas Company were incorporated in the State of Colorado, they would pay the same tax, or approximately the same tax?

A. I believe the treatment is about the same. I have never investigated that.

Q. All right. Well, now, in the next two pages you have made reference to a provision in contracts of the company with reference to cutting off or shutting off industrials when necessary to supply the demands of domestic users, and you set forth on those pages the various contracts and then also you refer to certain franchises that you state contain cut-off or shut-off provisions.

A. Yes.

Q. And set forth the terms of those provisions. Now, you follow that with this statement: "The foregoing restrictions and requirements and the necessary effort thereof, have been overlooked or ignored in all testimony and exhibits on behalf of the Commission?"

How do you arrive at that conclusion?

A. In our study of these exhibits the testimony does not bring out that domestic gas takes priority in all cases over industrial gas and I have attempted to show that priority here.

Q. In other words, there is no question but what you are presenting it here but what I don't think is proper, is the statement that all Commission witnesses in their exhibits and testimony have ignored this. Mr. O'Connor testified to some of those matters in connection with his Exhibit 51, didn't he?

A. Perhaps, but I don't think he put the necessary effect thereof in his exhibit. He soft-pedals that sort of thing.

Q. He soft-pedals it?

A. Yes.

Q. Wasn't he interrogated by Mr. McCreery about it, and didn't he state in answer to whatever Mr. McCreery's questions were with reference to any of those phases?

Mr. McCreery: What is involved here is the effect given to it, and Mr. O'Connor's exhibit was a mere historical statement. The exhibits that have dealt with the situation from the point of view of operations in volume and in dollars offered by the Commission are the exhibits to which Mr. Davis refers in the opinion expressed here in his testimony, among those, Mr. Lyon, Mr. Knapp, Mr. Vaught

and Mr. Smith, and all of the witnesses who dealt with the financial picture of the operation of this company. Mr. O'Connor's exhibit was a mere historical speech.

Mr. Lange: I was referring to Mr. O'Connor's testimony on cross examination.

Mr. McCreery: Yes, it was mentioned there, but he said no effect has been given and he has a right to express his opinion and that is his opinion.

Mr. Lange: But I don't think that this statement of the witness—I think that this statement certainly ought to be stricken as a pure conclusion on his part with reference to that; that is, the statement that they have been overlooked or ignored in all testimony.

Mr. McCreery: And the necessary effect thereof. A mere referring to it is not what Mr. Davis is referring to. He is referring to the effect that that method of doing business must have upon all of the operations of this company and that is his opinion expressed by him, even though counsel for the Commission may not agree with him.

Mr. Lange: Of course, the record will reflect exactly what that is and I still believe, though, that that statement as to the restrictions and requirements and the necessary effect thereof, have been overlooked and ignored in all testimony and exhibits on behalf of the Commission,——is purely a conclusion of the witness. I think it isn't fair to the witnesses of the Commission and I think that part of it certainly ought to be stricken.

The Trial Examiner: Well, I think myself that the particular paragraph in question deals with the matter about which the record will loudly speak and whatever this witness has to say about it, of course, while he may have that opinion in the matter, nevertheless, the record still speaks for itself. I can't see that that particular paragraph serves any purpose or has any proper basis for being contained in this particular statement.

Mr. Lange: I think, then—well, as I say, the place for it is not proper in this, and I move the Examiner to have it stricken from the exhibit.

The Trial Examiner: Of course the reservation was made at the time the statement was read that any portion of it could be stricken and the Examiner is rather inclined to grant the motion of Commission's counsel with respect to this particular paragraph.

Mr. McCreery: And let the record speak for itself.

The Trial Examiner: Yes.

By Mr. Lange:

Q. Now, the next paragrph, Mr. Davis, states: "Natural gas has always been sold and is sold to every industrial user, whether on direct sale or under resale contract, at a price in excess of the purchase price paid for such gas."

A. Yes, sir.

Q. What is your interpretation of that, or rather, what is your purpose in making that statement?

A. I merely wanted to establish here that we are not selling gas to anyone for less than what that gas cost us.

Q. Oh, you mean when you speak of less than what the gas cost you, you mean less than what you pay for it at the metering station where you get it from Colorado Interstate Gas Company?

A. What the natural gas costs us per foot.

Q. This statement on Page 2 takes into consideration no distance that gas may travel to industrial users from that metering point?

A. I am not taking into account the cost of operations or incremental costs.

The Trial Examiner: You have reference to the contract price?

The Witness: Purchase price, yes.

By Mr. Lange:

Q. I was wondering what you had in mind in making a comparison with what you sell it for at the delivery point for as distinguished from what you paid for it at the metering station of Colorado Interstate.

A. I think that probably some of the exhibits that have

come in here, you might get the inference from them that we were selling gas for less than it cost us.

Q. Well, is this less than the costs you have?

A. No. We have operating costs. I mention here only the purchase price of said gas.

Q. You are just stopping at some particular point?

A. I am stopping at that point, yes.

Q. And not taking into consideration any other costs?

A. No.

Q. The next page, where you have these figures as to peak day purchases and deliveries, the February 1939 figures on gas delivered to Great Western Sugar Company, you have a notation here that the supply was cut off at 2:15 p. m. for the balance of the day, that is, February 9, 1939. How much gas had been delivered that day before the cut off?

A. To the Great Western Sugar Company?

Q. Yes.

A. I don't have that figure separately, but we do show there a total of 522 Mcf. had been delivered to all industrial customers during that 24 hours.

Q. Wasn't there in addition to that 1099 Mcf. delivered before that cut off?

Mr. McCreery: We are trying to get it from the work sheets which Mr. Davis has to have before him in answering your question, Mr. Lange.

Mr. Lange: I just wanted to get those figures in to get the complete picture.

Mr. McCreery: I was getting that work sheet. I think that is the correct figure, but I would like to have him have that before him.

By Mr. Lange:

Q. What does your work sheet show with reference to that on the deliveries to Great Western Sugar Company on February 9, 1939?

Mr. McCreery: Prior to the 2:15 p. m. shut off?

Mr. Lange: Yes.

The Witness: It shows we delivered during that period

1,099,000 cubic feet. That is computed at a pressure base of 14.65.

By Mr. Lange:

Q. And then have you got it computed at the 12.9 pounds pressure base?

A. Yes, 1,248,000 cubic feet.

Q. So you would add in each instance, or, rather, you would add at the 14.65 pounds pressure base, 522, to the 1099, wouldn't you—Mcf. in each instance? Wouldn't you add that 522 that you just stated to the 1099 Mcf.?

A. I believe you would.

Q. It would give you a total of 1621 Mcf. at 14.65?

A. To all industrials.

Q. And under the 12.9 pressure base you would add the 522—the 593 to the 1248?

A. That's right.

Q. Which would give you 1841 Mcf.?

A. Yes, 1841.

Mr. Lange: May we make those corrections, Mr. McCreery, so we can have them right in the record?

Mr. McCreery: You can add them in the record. They aren't corrections. It is quite agreeable if you want to put them there, but they aren't by way of corrections.

Mr. Lange: Well, wouldn't it give the full picture as to the total industrial for that date?

Mr. McCreery: Up to 2:15. What we are showing is what happened on that day at 2:15, and that this was the remaining load, but if you want to add it, we have no objection at all, but we don't want it added as a correction of an error, because there is no error involved.

The Trial Examiner: I think perhaps it might be well with the explanation that has been made to—

Mr. Lange: Very well. I was just thinking of having it in at that point, but it isn't essential.

The Trial Examiner: What they are showing there is the situation after 2:15, is that correct?

Mr. McCreery: Yes. We wanted to show that a sub-

stantial industrial load was delivered before the shut off at that time during the day and there remained on during the day 522 at 14.65.

By Mr. Lange:

Q. During the next—you have on the next page of the exhibit, you have two years actual, expenses and one year, 1941, estimated.

A. Yes.

Q. These 1941 estimated expenses, did you compute those?

A. I did, yes.

Q. On what basis did you arrive at those figures?

Mr. McCreery: For your information, these expenses were computed and set out in the exhibit offered by Mr. Hancock, Exhibit No. 116 originally, and this is a recomputation of that detail contained in that exhibit, reflecting the actual completed year 1940 and a revision for 1941 of regulatory commission expense and the elimination from 1939, 1940 and 1941 and subsequent years of any allowance for donations and expense accounts along the line of those which were referred to in Mr. Smith's exhibit so that those are the only variations from the original computation if that will facilitate your examination.

Mr. Lange: Yes.

Mr. McCreery: There are no changes.

By Mr. Lange:

Q. Then what I want to ask Mr. Davis about is that portion of the breakdown appearing on the succeeding page with reference to his amortization of regulatory commission expense. Why was that computed in that fashion?

A. Under the belief that that would be the proper way to dispose of it.

Q. You just figured a five-year period of amortization?

A. Yes.

Q. Without any particular reason for taking five years or any other period?

A. Well that's the customary block, I believe, that the Commission uses.

Mr. McCreery: It is figured both ways.

By Mr. Lange:

Q. The Commission, of course, hasn't used any in this proceeding as yet.

A. Yes, that's true.

Q. Exactly what are your mechanics in making that computation, Mr. Davis?

A. We are accumulating the 1939 and 1940 and 1941 and 1942 expenses as anticipated they would be and writing them off at the rate of 20 per cent a year as they occur.

Q. That is the basis of the computation you have used there, is that right?

A. Yes, except that for 1942 and from there on we anticipate approximately an even expenditure per year of 2500 dollars. This will be continued, which will be continuing from there on.

Q. Is that 2500 dollars estimated by Mr. Hancock?

Mr. McCreery: Yes.

The Witness: Yes.

Mr. McCreery: Except in the respect that it is indicated that this is an identical computation.

Mr. Lange: I see.

Q. There is one item on this estimated 1941 that is $2.00 for a test hole. Was that an item of expense in 1939?

A. In 1939?

Q. Yes.

A. Yes, that expense was incurred in 1939 and was overlooked by us and charged directly to operating expense. We now propose to retrieve that and put it back into regulatory commission expense.

Mr. McCreery: It was in connection with the test holes?

The Witness: It was in connection with those coupons we cut out of the line.

By Mr. Lange:

Q. Well, then, it really belongs in the setup in 1939, doesn't it?

A. Yes, although it won't appear on our books under this regulatory commission expense until 1941.

Q. Yes.

Mr. McCreery: But it could be referred back?

The Witness: It could be dated as of 1939.

Mr. McCreery: I think that appears in Mr. Smith's Exhibit 202 as an item of regulatory commission expense, does it not?

The Witness: Yes.

By Mr. Lange:

Q. Now, on this same page of your exhibit, executive salaries, I notice the salary of the Secretary. That is your salary for 1939?

A. Yes.

Q. For 1939, 1940, they are $3113, and you have an estimated $4800 for 1941. During 1939 and 1940, I will ask you whether a portion of this salary was paid by any other company.

A. Yes, a small portion was paid by some other little companies which I looked after in a small way.

Q. Approximately what was that amount per year?

A. About $200 I believe.

Q. Now, do you take that into consideration in your estimate in 1941?

A. No, because those companies are practically dissolved now and the work is disappearing.

Mr. McCreery: So that that payment does not hereafter come from those companies at all?

The Witness: There would be nothing there to charge it to.

By Mr. Lange:

Q. What does the letter "R" in parenthesis indicate under "Legal Expense" in 1940, $247.50?

A. Credit.

(Vol. 84, pp. 12524-12577.)

Company Exhibit No. 243 (Appendix this Record).

The calculations in Exhibit 243, Statements Nos. 1, 2 and 3 (see, Appendix), indicate the method by which the total sum of $23,718.50 was computed.

On cross-examination the witness *Willard* was questioned by Commission Counsel as to his criticism *(Entries 205 and 206, Exhibit 199)* of the treatment of those items by the Commission's accountants. He stated that his criticism was that the two calculations of interest on the main 10-inch and 8-inch line is that as soon as a partial service went into effect from either of those lines, the entire portion of the line up to point of service was eliminated entirely from interest during construction charges. The 10-inch main line from Littleton to Boulder started service to Boulder on September 29, 1929. Interest-during construction charges were figured (by Vaught) to October 1, 1929, and no further interest charges allowed. The 10-inch line was not designed to serve Boulder alone, and when the City of Boulder alone started service, it should not be considered that the entire construction cost of the 10-inch line went into service. The same applies to the 8-inch line from Boulder Junction to Fort Collins. This applies even though there is some delivery of gas through the line. The part used was segregated on the basis of the demand actually used by the line based on deliveries December 26, 1938. The 10-inch line was designed to carry a certain load. Part of that load was supposed to go to the City of Boulder, part of it to other points north of Boulder, and he allocated from the 10-inch main line the cost applicable to Boulder, based on the actual deliveries December 26, 1938. His computation is not directly or indirectly a matter of excess capacity. Interest during construction "is the interest charges on the property in the process of construction until such construction program is complete, in its original inception."

(Vol. 84, pp. 12,579-12,581.)

The witness was questioned as to whether or not certain revenues had accrued from the distribution of gas to Boulder, to which he replied that such revenues were assigned

to the investment which had been removed from the total investment on which interest was charged. Such revenue was not properly assignable to the entire line. (Vol. 84, p. 12,586.) December 26, 1938, was used because that was the maximum Boulder demand upon the system up to the time the calculation was made. (Vol. 84, p. 12,588.)

The witness was then questioned in regard to a letter of November 7, 1939, from Colorado-Wyoming Company to the Commission, in which it was stated that Public Service Company of Colorado requested that the line be of sufficient capacity to enable the Company to serve gas to the Valmont plant. This involved changes in the construction from Arvada to Boulder Junction. In connection with this the witness testified as follows:

"A. I eliminated in its entirety the entire 8-inch and 6-inch branch line from Boulder Junction to the location where the Valmont branch now takes off and extending on into the City of Boulder. I eliminated from the cost of the 10-inch line which now runs all the way from Littleton to Boulder Junction the proportionate cost assigned due to this peak reached on the particular day that I have previously mentioned.

"Q. Then in your opinion the construction to be placed on the term 'interest during construction,' would cover a period of time that the final link in the line would be completed, although there was service actually, that there was service actually being had along the entire line up to that last link? You would suspend a proportionate part of interest during construction because of the incompleted last link of the line?

"A. I would rather put it another way. I would eliminate from interest during construction charges—those charges assignable to the deliveries that were made prior to the final link.

"Q. And in making such computations, what consideration or effect are you giving to the capacity of the line? Does that have anything to do with it?

"A. Well, the capacity of the line naturally has a bearing on the allocation. That is the thing on which the allocation has been made. The capacity of the line on this particular day—."

(Vol. 84, pp. 12,589-12,590.)

In further explaining the exhibit the witness testified: "It assigns a portion of the 10-inch line and the 8-inch line to those customers who receive gas prior to the date gas was delivered at Fort Collins and in assigning a portion of the cost of the 8-inch and the 10-inch line to those customers who receive gas prior to the date gas was delivered at Fort Collins and in assigning a portion of the cost of the 8-inch and the 10-inch line to those customers who receive gas, I have eliminated from interest during construction charges the applicable charges to those deliveries."

At the same time the revenues received from such deliveries were assigned to that portion of the main line so eliminated.

(Vol. 84, pp. 12,591-12,592.)

Q. Now, first, Mr. Willard, with reference to the entries made by you in Exhibit 243, that is, Entries 205 and 206 of Commission's Exhibit 199, adjustments for interest during construction, what in substance is your criticism of the treatment of those items by the Commission accountants?

A. Well, my criticism of the two calculations of interest on the main 10-inch line and the main 8-inch line is that as soon as a partial service went into effect from either of those lines the entire portion of the line up to that point of service was eliminated from interest during construction charges.

For example, on the 10-inch main line from Littleton to Boulder, service started at Boulder September 29, 1929. Mr. Vaught in his calculation of interest, I believe, he carries the interest charges to October the 1st of 1929 on the 10-inch main line and then dropped any further charges from consideration.

The 10-inch main line from Littleton to Boulder was not designed to serve Boulder alone and when the City of Boulder did start service I would not consider that the entire construction cost of the 10-inch main line went into service. The same theory applies to the 8-inch line from Boulder Junction to Fort Collins.

Q. Now, there is no question—Mr. Vaught did not question the interest item up to the time that service was

actually commenced, did he; that is, a delivery of gas was being made through the line, wasn't it?

A. That is correct.

Q. All right, now, how are you going to make use of any part of the pipe; that is, the main transmission line? How are you going to segregate the part that you say is not in operation from that—

A. I have segregated it on the basis of demand actually used by the line on this day. I have segregated the cost of that line based on deliveries December 26, 1938. That line was designed to carry a certain load. Part of that load was supposed to go to the City of Boulder, part of it to other points north of Boulder, and I have allocated from the 10-inch main line the cost applicable to the Boulder delivery based on the actual deliveries December 26, 1938.

Q. Now, you are there again, if not directly, at least indirectly, getting the matter of excess capacity into the picture, aren't you?

A. No, sir.

Q. You are not?

A. No, sir.

Q. Well, going back to—what is your exact definition of interest during construction as you are treating it in this exhibit?

A. Interest during construction is the interest charges on the property in the process of construction until such construction program is complete, in its original inception.

Q. Such program?

A. Yes.

Q. In other words, you, of course, wouldn't think of having any interest charges accruing or accumulating after the property is in service. There is no such item that accrues as a part of the plant account after the property is in service, is there?

A. Yes, I think so.

Q. Interest during construction?

A. Not interest during construction.

Q. Well, that is what I mean. I am limiting it at this time to the term "interest during construction." That by its very nature is limited to the period of construction.

A. Yes, sir, but the construction project was not completed at the date Boulder was first served with gas.

Q. You mean a part of it was not completed?

A. The construction project which started at Littleton went north to Fort Collins and had branches to various towns from laterals off the main 10-inch and 8-inch line.

Q. Of course, the question at issue in connection with this exhibit is as to whether interest during construction should have been computed and allowed after the first service of gas was had. Isn't that what it boils down to?

A. After first service of the completed project.

Q. Of the completed project?

A. Yes, sir.

Q. But Mr. Vaught did allow it up to the time of first service, didn't he?

A. He allowed it up to the time Boulder was served.

Q. All right, supposing you had a line serving an industrial. How long do you say that interest during construction should be computed on that, the same method applied?

A. I would want to know something of the conditions. If you build a line to serve an industrial and if that is the only customer and the project is completed and the industrial is served, interest during construction would stop.

Q. Well, assume you have a 20-inch line 200 miles in length which was to be constructed, and a 4-inch lateral serving a small community, or you might say an industrial, at the half-way point as a part of the project. In other words, if such a situation were to take place you would continue the interest during construction although the line was ready for service and service had actually commenced on that lateral?

Mr. McCreery: The exhibit shows that he would not continue the interest during construction on that part of the line in serving that 4-inch lateral.

By Mr. Lange:

Q. Exactly where would you stop with the computation of your interest—what portion of the line?

A. I would stop computation of the interest on the actual cost of the 4-inch lateral.

Q. Only?

A. No. I would also assign a portion of the 20-inch line which was applicable to the 4-inch delivery and cease interest during construction charges on that portion of the 20-inch line and that is the very method of the calculation here.

Q. Now, that portion of the 20-inch line through which gas is moving to serve that lateral is completed, isn't it? There isn't anything further to be done on that, is there?

A. In the way of construction you mean?

Q. Yes.

A. No, the line would not be serving gas unless construction were completed up to that point, but nevertheless, I still say that that is a part of a project and the 20-inch line as a 20-inch line has not gone into full service.

Q. Well, the main line, that portion of the main line serving the lateral is in actual use, and the construction of it necessarily has to be complete before you would permit gas to go through it as an operating problem.

A. That is correct, and I would deduct from the total cost of the 20-inch construction charges that portion assignable to the 4-inch delivery.

Q. Yes, but your main line from which this 4-inch lateral gets its gas is a completed pipe up to the point where the lateral connects on. It is complete for service.

A. On that theory each day, week or month, completes a certain part of a construction job and under the basis that you are now talking, interest during construction charges would have to cease on each portion of the line that is completed by the day, week or month, as you see fit.

Q. All right, now, you say that only a portion of this main line that is being utilized for the gas that is served through the lateral is a completed project in so far as interest during construction is concerned and you have only computed a proportionate part of that, haven't you?

A. I have concluded—I have computed a proportionate part of that assigned to the delivery that went through the line.

Q. How can you segregate a portion of the line that necessarily must be complete before even a cubic foot of gas can go through it?

A. By the allocation of demands to the various points for which the line was designed to serve and by actually taking a demand such as I have done here which was reached at some later date and allocating the cost of that line to the portions served.

Q. Now, as soon as gas moved through the line to serve the lateral there was a customer, of course, at the end of

the lateral and certain earnings accrued from that customer, didn't they—certain revenues accrued?

A. Certain revenues. I don't know whether earnings accrued.

Q. All right. Did you credit any part of those net revenues to that particular portion of the main line on which you are still charging a proportionate part of interest during construction?

A. Any revenues that were received from the Boulder delivery, and I assume that that is what you are speaking of now, would be assigned to the investment which has been removed from the total on which interest is being charged.

Q. Was there any portion of that revenue directly assigned to that particular unit of property on which you were still setting up interest during construction?

A. There was revenue being received from the Boulder delivery. There was investment removed from construction costs on which interest during construction was calculated and those revenues are assignable to the costs that were eliminated.

Q. They are assignable, but were any portion of them actually assigned to that particular unit of property?

A. I don't believe there is anyone who can calculate whether or not any earnings were received from the Boulder delivery and get a correct operating expense chargeable to that Boulder delivery for such a thing as an interest credit.

Q. It is just about as difficult a thing as it is to segregate any part subject to interest during construction?

A. Oh, no, that's not a hard calculation at all.

Q. It isn't?

A. No.

Q. Now, how is that computed?

A. Just on the basis of the demands that were reached on this peak day, December 26, 1938.

Q. Now, when was this line—or, rather, when was this interest during construction at issue? What period do you have in mind? What year was that?

A. From October 1, 1929 up through the month of January 1930.

Q. All right, now, this method that you pursued—or, rather, the mechanics that you used in calculating this portion of it on interest during construction it could not have been put into effect at that time?

A. Oh, I think it could. This line was necessarily designed to meet certain peaks at certain localities. I don't have the initial plans on the design but any pipe line has to be designed to carry certain loads to certain localities. Certainly this line was designed on that order.

Q. And this calculation that you have made in Exhibit 243, you have utilized the 1938 peak figures?

A. That is right.

Q. And related them back?

A. That is right, because that was a maximum peak on the system up to the time the calculation was made and if there had been any other maximum peak I would also have considered that.

Q. Do you recall what was said in that letter Mr. Davis wrote to the Commission dated November 7, 1939 that was read into the record by Mr. Hancock relative to this portion of the line, the 10-inch line that was constructed, I think it was from Arvada up to Boulder Junction?

A. I don't know.

Q. I have a copy of that here. Do you recall that letter?

A. Yes, I do.

Q. Well, in other words, the line was not originally designed for that 10-inch portion of it, was it, the 10-inch portion of the line that was constructed was constructed because of Public Service Company of Colorado requested it as set forth in this letter of November 7, 1939?

A. Certainly. Public Service Company of Colorado's request was that this line be designed to serve such customers as it had along the route of the line.

Q. But it resulted in a change from the original design of the line?

A. I don't believe—

Q. Starting at the Valmont plant?

A. Maybe I didn't read far enough in that letter, but I didn't see where it said there was a change in the original design.

Q. All right, this is what the letter says:

"At the time of constructing our main line from Denver to Fort Collins, Public Service Company of Colorado specifically requested that we include sufficient capacity in our line to enable us to serve gas to the Valmont plant. This involved changes in our construction from Arvada to Val-

mont Junction. One increase proposed an 8-inch line from Arvada station to Boulder Junction to a 10-inch size. Also an increase was proposed in a 6-inch line from Boulder Junction to Valmont Junction of an 8-inch line."

Doesn't that propose a change in the original design?

A. That is what it says.

Q. All right. Did you give that consideration in your discussion of this exhibit 243?

A. I eliminated in its entirety the entire 8-inch and 6-inch branch line from Boulder Junction to the location where the Valmont branch now takes off and extending on into the City of Boulder. I eliminated from the cost of the 10-inch line which now runs all the way from Littleton to Boulder Junction the proportionate cost assigned due to this peak reached on the particular day that I have previously mentioned.

Q. Then in your opinion the construction to be placed on the term "interest during construction," would cover a period of time that the final link in the line would be completed, although there was service actually, that there was service actually being had along the entire line up to the last link? You would suspend a proportionate part of interest during construction because of the incompleted last link of the line?

A. I would rather put it another way. I would eliminate from interest during construction charges—those charges assignable to the deliveries that were made prior to the final link.

Q. And in making such computations, what consideration or effect are you giving to the capacity of the line? Does that have anything to do with it?

A. Well, the capacity of the line naturally has a bearing on the allocation. That is the thing on which the allocation has been made. The capacity of the line on this particular day—

Q. Well, then, aren't you getting that portion of interest during construction connected up with the interest on excess capacity?

A. No, sir, not at all.

Q. You aren't?

A. No, because the project as a construction project was not complete and at the day the final construction was com-

plete, all charges cease on the date of final construction completion.

Q. All right, then, if you had service on the line, excepting say a few miles at the farthest end to the north, and had all of your laterals completed and serving all of the customers on every one of those laterals and even those off your main line—directly off the main line, you would still consider that an incomplete project in relation to interest during construction?

A. That portion of the project that is to serve the last customer, yes, sir.

Q. Well, but you aren't limiting it to that?

A. Yes, I believe I am.

Q. You are still giving a proportionate interest, or setting up a proportionate interest charge on the entire rest of the system facilities?

A. This exhibit simply does this: It assigns a portion of the 10-inch line and the 8-inch line to those customers who receive gas prior to the date gas was delivered at Fort Collins and in assigning a portion of the cost of the 8-inch and the 10-inch line to those customers who receive gas, I have eliminated from interest during construction charges the applicable charges to those deliveries.

Q. Yes, but you still maintain that it would not be possible to have assigned to those particular portions of the line, on which you are still setting up interest during construction the similar proportionate part of the revenues received?

A. Well, any revenues received from those deliveries are assignable to the construction costs that have been eliminated in the interest during construction calculation.

Q. Yes, but you can't get your same proportions. Your proportionate part of your revenue couldn't be made applicable under your construction to the same proportionate part of the interest charge. It couldn't be a correct accounting offset setup, if you want to put it that way, or put on the books?

A. Oh, I believe an accounting setup probably could be made at the time of construction and delivery, if the time of all men engaged in operations were so segregated to indicate charges against each delivery in the system.

Q. You say it could be done?

A. If each individual would segregate his time to some

portion of the system that he was working on, that could be done, but that isn't practical at all.

Q. Well, it wasn't in fact done.

A. No, it never would be done.

Q. Well, then, you get right back to the situation that you are serving gas through a particular portion of your system that is supplying customers from whom revenue is received and there is no direct relation to whatever credit *them* may be from that revenue against your interest charge for that particular line that you utilize. You can't definitely relate the correct proportionate part of your revenue accruing to the proportionate part of your interest charge that you are setting up.

A. No, there aren't records available to do that. That gas may have been sold during the first month at a loss and a substantial loss. Operating expenses may have been such that they were high during the early months of delivery when volumes of gas were low and instead of having a credit against interest during construction, it may be the reverse. It is hard to tell whether we made any money out of the first two months of delivery at Boulder.

Q. You don't know that?

A. No.

Q. Have you ever made any check on that?

A. I don't believe a check could be made.

Q. Well, that wasn't the only point of delivery at that time, was it, Mr. Willard?

A. No, there were four points of delivery before the final connection at Fort Collins. Boulder was connected—now, when I say "connected," I mean the date to which Mr. Vaught carried his interest charges. The actual connection may have been a few days or a week ahead of this date, but I have accepted his date for interest charges. Boulder was connected September the 30th, 1929. Edgewater was connected October 31, 1929. The Great Western Sugar Company load was connected November 30, 1929, and Arvada and Berthoud were connected December 15, 1929. Those were the only deliveries prior to the final connection at Fort Collins which was the 31st of January, 1930.

Q. Now, I take it that you have no argument as to the correctness of the accounting principle applicable where you are still charging interest during construction on either

a line, or a portion of the line that you say construction is not entirely completed, to credit against that interest during construction any revenues received?

Mr. McCreery: What do you mean "portion"?—lineal portion or portion of capacity?

Mr. Lange: Any portion of the line that is still being charged with interest, using the formula that Mr. Willard employs and the proper credit for revenue be made. I mean taking his view of it, that the entire project had not reached its final construction state, but gas was being delivered to a portion of the main—through the main line, up to a certain point and delivered to a lateral.

Mr. McCreery: Using a portion of the capacity of the main line up to that point, is that what you mean?

Mr. Lange: Whatever it may use. Gas may flow through a 10-inch line as well as through an 8-inch line or a 12-inch line. This gas is moving through that completed portion of the main line to the lateral and delivered to a customer from whom revenue accrues. There is net revenue. Shouldn't that be applicable to whatever charge you assess against the main line utilized in interest during construction?

Mr. McCreery: I will ask to have it clarified. Does he mean the capacity of the line, that portion of the capacity of the line used which is the basis of this exhibit? His question is not clear.

Mr. Lange: I disregard capacity entirely. You have a certain investment in that main line that goes up to the point of the lateral through which gas is being delivered. That main line is complete up to that point. You have got certain revenues at the end of that lateral. I want to ask the witness as an accounting problem whether it is not correct to credit that revenue as against whatever interest charge you are still setting up on this main line that is being used.

The Trial Examiner: You say now, Mr. Lange, "revenue." You said before "net revenue."

Mr. Lange: There is just one revenue item in the picture.

Mr. McCreery: I want this question made clear. As I

understand it, a certain proportion of the capacity of the line, however small it may be, is utilized by the supposed lateral. Now, I want to know whether Mr. Lange refers to that proportion of the main line capacity which is devoted to this lateral or the remaining portion of the main line which has not yet had service for the purposes for which it was built.

Mr. Lange: I mean the total investment in that main line.

Mr. McCreery: You mean the whole pipe?

Mr. Lange: Yes, the whole pipe, because I don't think it can be segregated.

The Witness: Well, in the first place I think it would be impossible to determine whether or not there was any net revenue from a delivery that is being made during a construction program. If there were any net revenue, I think it is proper to assign that net revenue to the construction charges applicable to the delivery from which the net revenue was obtained.

By Mr. Lange:

Q. Was that done in this particular instance?

A. I eliminated in this instance the investment assignable to the deliveries as they came on and if there was any net revenue it applied to the investment which has been eliminated from this total for interest calculations.

Q. But there was no segregation of it made—no attempt to segregate it?

A. Of revenue?

Q. Yes.

A. No.

(Vol. 84, pp. 12579-12597.)

By *Entry 207, Exhibit 199, Vaught* eliminates "certain traveling expenses" for the year 1929 from Plant Account in the amount of $543.32. His statement in that behalf is:

"To reverse Company's traveling auditor's adjustment (T. V. 894, May 16, 1930) which capitalized officers' traveling expenses previously charged to expense by the Company in 1929.

"The accounting entries made by the local accounting staff when the charges originated, are considered as evidence that the items were then regarded as applicable to operating expenses rather than to construction. No evidence was found to show that the expenses related to construction."

(Ex. 199, p. 18.)

On cross-examination, the witness Vaught stated that had the original charge by the local accounting officers been made to capital, and later reversed by the traveling auditor and by him charged to expense, in precisely the same manner as was done in connection with the charges dealt with in Entry 207, he *(Vaught)* would not have questioned the action of the traveling auditor. (Vol. 66, pp. 9558, 9559.)

Entry 208, Exhibit 199 by *Vaught*, eliminates $375.00 capitalized in 1930, from Plant Account. This was pre-construction costs in relation to the Greeley line, built later. The statement of Vaught follows:

"This amount represents one-half of the cost of a report furnished by the above firm, covering 'an examination of Berthoud field, presentation of facts concerning the field before the City Council of Greeley and preparation of reports and maps on the Berthoud field; two reports furnished to Mr. Lee Carrol of the Greeley City Council and two to the Colorado-Wyoming Gas Company.'

"It appears that the purpose of the report was to determine the feasibility of serving the City of Greeley with Berthoud field gas rather than Texas gas. The result of the report showed that it would be impossible for Berthoud field production to meet the requirement of the City of Greeley.

"In view of the above facts and the fact that one-half of the cost was charged to operating expense at the time payment was made it appears the whole of the cost should have been considered as a cost of acquiring town-border service at Greeley rather than a cost of construction of the Greeley lateral."

(Exhibit 199, p. 19.)

On cross-examination *Vaught*, made a distinction (a) between the capitalization of such an item, had it occurred in 1925 before any part of the Company's system had been built and (b) occurring in 1930 when a part of the system had been built and when the Loveland-Johnstown-Greeley line (to which the item in question related) was merely projected. The line itself when later constructed, of course, was properly capitalizable. (Vol. 66, pp. 9574-9580.)

In rebuttal, H. P. Davis, Secretary of the Company, testified:

"Referring to Entry 208, page 19, Exhibit 199, *Vaught* has eliminated from plant account an item of $375.00 which he states was capitalized on voucher 1988, and which in his opinion should have been charged to expense. Mr. Vaught made no inquiry regarding this item.

"In 1928, the Berthoud Oil Field, near Berthoud, Colorado, fell into the control of certain promotional interests, who later organized themselves under the name of Standard Oil Company of Colorado. These interests promptly busied themselves with promoting the sale of gas which they proposed to produce from the field. They failed to make engineering and geological studies as to the character, extent, life and potentialities of the field but devoted their attention to securing franchises in the towns of Berthoud, Johnstown, Loveland, Longmont and Greeley without proper investigation of the possibilities of the field. These commitments were far in excess of the possible production of the field but persistent representations were continued to be made by them to the various towns with the result that the city of Greeley declined to discuss or entertain the offer of Colorado-Wyoming Gas Company to extend a branch line to Greeley and to serve the distribution company with gas from its lines. In the latter part of 1929 we requested Messrs. Fisher and Lowrie, geological engineers to examine the Berthoud Field and present their findings before the city council of Greeley. This was done and as a result the council voted to permit the franchise granted Standard Oil Company of Colorado to expire and to grant the Greeley Gas & Fuel Company, the distributing company at Greeley a franchise for distribution of our

gas. The cost of these reports was $750.00 and was definitely a pre-construction cost incurred to make actual construction possible. I feel that Mr. Vaught's revising entry is without foundation."

(Vol. 83, pp. 12,423-12,425.)

Further, the witness, *Davis* testified as to the reason for capitalizing only one-half of the total item:

"Probably what the influence was, our understanding then when this expenditure was authorized, was that the City of Greeley would stand one-half of the expense. They later failed to do that and we absorbed it ourselves as construction cost."

(Vol. 84, p. 12,548.)

Entry 210, Exhibit 199, eliminates $119.36 Organization Expense, capitalized in 1926 and 1931, from the plant account. In the exhibit, at page 20 it was said by *Vaught:*

"The above amount of $40.16 (Vol. 3, January 30, 1926) represents expenditures for a ledger, journal and general books and the $79.20 (Vo. 2833, February 18, 1931) represents filing fees on corporate property located in Colorado."

On cross-examination, the witness *Vaught* maintained that while setting up the books of the Company is a proper organization expense, it should not include the general ledgers; and that while "the filing fees" covered "the enlarged capital" in the amount of $264,000 resulting from building the Fort Collins-Littleton system, that item should not be capitalized.

(Vol. 66, pp. 9580-9583.)

By *Entry 211, Exhibit 199,* the witness *Vaught* eliminates certain organization expense capitalized in 1926 and 1932, in the amount of $1,017.76, from the plant account as follows:

"Date	Reference	Description	Amount
Jan. 31, 1926	T. V. 9	Director's fees, 12/19/25	$200.00
		Fee for filing annual report	2.00
May 31, 1926	Vo. 170	Tax stamp	50.76
		Tax on capital stock	15.00
June 28, 1932	Vo. 3565	Original issue documentary stamp tax	750.00
			$1,017.76

"The charges dated January 31, 1926 covered by transfer Voucher 9 represent items which should have been charged to expense at the time incurred.

"The charges covered by Vouchers 170 and 3565, respectively, appear to represent expenses incurred in connection with issuance of capital stock and therefore should be classified as 'Capital Stock Expense.'"

(Exhibit 199, p. 21.)

The witness *Vaught*, on cross-examination, testified that there were two directors' meetings December 19, 1925; that the first meeting of directors was held December 1, 1925; that the meetings of December 18, 1925 came next; and that at the three meetings only the following business was transacted.

"A. At the first meeting held December 18, 1925, the by-laws were approved. Any two officers could sign checks, notes, and so forth. That was the business carried on at the first meeting, December 18, 1925.

"Q. And the second meeting?

"A. The second meeting of December 18, 1925, at it a resolution was adopted accepting the offer of H. O. Caster dated December 18, 1925; officers were authorized to issue 4,990 shares of capital stock therewith which should be deemed fully paid and not liable for any further assessment. The officers were authorized to pay to or upon the order of H. O. Caster $76,800.

"Q. That was all the business transacted?

"A. That was all the business transacted.

"Q. Were there any director's fees paid for the first meeting in December?

"A. I would have to check that to be sure—I don't believe there were."

(Vol. 66, p. 9586.)

The filing fee, tax stamp, tax on capital stock, and original issue documentary stamp tax, all relate to the amendment of articles and increase in capital stock (Ex. 100), due to the enlarged capital required by the construction of the Littleton-Fort Collins system (Vol. 66, pp. 9584-9590): The witness de ied that these items belong under the Federal Power Commission "Uniform System of Accounts, Natural Gas Companies, 301, Organization" and items as detailed therein. (Vol. 66, pp. 9591-9592.)

By *Entry 212, Exhibit 199, Vaught* eliminates from the Plant Account the facilities constructed for rendering service to International Metal Foundation in the amount of $4,430.67 as "Gas Plant Held for Future Use." (Ex. 199, p. 22.)

The facilities in question are now "in use," as shown by the testimony of H. P. Davis, Secretary of the Company, as follows:

"Referring to Exhibit 199, Entry No. 212, page 22, Mr. Vaught has reclassified the cost of facilities installed to serve the International Metal Foundation to Gas Plant Held for Future Use. The building, which was to have been served was constructed for use as a smelter, has now been leased to the U. S. Government for use as a central motor repair depot. We have agreed to render gas service to this depot. Our pipe line and measuring facilities *are being placed* in readiness to commence this service. The form of contract has been tendered to the government and we are assured it will be executed and service begun on or about March 1. Accordingly, the Vaught reclassification entry No. 212 must be voided, as this branch line is 'Plant in Service.'"

(Vol. 83, p. 12,423; Ex. 287.)

In *Entries 213-217, inclusive, 218-219, 222 and 223, Exhibit 199* the witness *Vaught* eliminates and reclassifies from the

Plant Account $3,278.54 in entries 213-216, inclusive. $2,111.24 in Entry 218; and $1,007.31 in Entry 219 (for the reasons stated by the Examiner, Ex. 199, pp. 22, 23, 24, 27, 30, 33). The various amounts stated as reflected in the enumerated entries were eliminated by the Company witness *Willard* from Plant Account in Exhibit 245, revising plant accounts as contained in Exhibits 111, 115, 117, 118. (Vol. 83, pp. 12,440-12,442.) These eliminations were also reflected in "Net Return" (Ex. 248.

Entry 217, Exhibit 199, relates to "interest during construction," which is covered in re-computation of that interest by both the witness *Vaught* and Company witness *Willard* (Ex. 199, p. 30).

Entries 222 and 223, Exhibit 199, amounting to $51.63 and $29.74, respectively, correct minor errors in retirement of property. (Ex. 199, p. 36.)

(b) Depreciation. (Ex. 107, 108, 109, 110, 111.)

HARRY D. HANCOCK testified upon this subject on behalf of Colorado-Wyoming Company.

The witness, in his preliminary statement, detailed his education, employment and experience, but in view of the record herein, which discloses that he is outstanding in his profession, it is only necessary to refer briefly to his qualifications.

He has specialized in gas engineering work for the past 28 years and in natural gas engineering work for the past 20 years. He is and for many years last past has been consulting gas engineer for all the Cities Service Gas properties.

> "In conjunction with my professional work as a design, operating and consulting engineer it has been and is necessary for me to study and analyze the records of the various companies and properties with which I have been and am now connected in a professional capacity. I have so familiarized myself in the case of the Colorado-Wyoming Gas Company, as well as other companies, with the pertinent records relevant to my engineering studies."
>
> (Vol. 24, p. 3386.)

He testified that since January, 1927, he has been Consult-

ing Engineer on natural gas, production, transmission and distribution problems of the Cities Service Company and its subsidiaries. The pipeline and distribution companies, to which he rendered service in this capacity, have approximately 14,000 miles of gas pipelines and mains, serve in excess of 400,000 customers, and sell approximately 134 billion cubic feet of gas per year.

He has spent a portion of his time in the last few years in connection with the activities in various professional and trade associations and their committees, including Committee D-3 on Gaseous Fuels of the American Society of Testing Materials; the Main Technical and Research Committee of the American Gas Association; the Gas Measurement Committee of the American Gas Association; the Committee on Production Valves and Fittings of the American Petroleum Institute; Chairman of the Rate Structure Committee of the American Gas Association; and the Pipeline Committee of the Natural Gas Section of the American Gas Association. In connection with the activities of the committee last named, he has engaged in various natural gas engineering studies, including investigations of pipeline leakage, the flow of natural gas in pipelines and the phenomenon of the formation of natural gas hydrates in high-pressure gas pipelines. These studies were conducted in cooperation with the United States Bureau of Mines. He has also engaged in the formulation of the American Tentative Standard for Pressure Piping, sponsored by the American Society of Mechanical Engineers and approved by the American Standards Association. All of these activities are continuing at the present time. He is now Chairman of the Natural Gas Section of the American Gas Association (Vol. 24, pp. 3383-3387).

He has frequently testified before numerous regulatory bodies and commissions (Vol. 27, pp. 3506-3510).

In 1939, he inspected the pipeline system, compressing stations and measuring stations of Colorado-Wyoming Company, to determine the condition of these items of property in relation to new or original condition, for presentation in this case.

In connection with the preparation of his testimony and exhibits in this case, he made no investigation and had no in-

formation before him as to the reserves of gas available to the Colorado-Wyoming Company, through the companies from which it purchased gas (Vol. 25, pp. 3510-3512).

As to the method and technique of his pipe line inspection, he testified as follows:

"The pipe line system was inspected under my direction at 83 places, and 35 of these inspections were made by me personally. In addition, 26 inspections made by F. W. Stoddart were observed by me personally.

"There are two series of inspections—Inspection No. M-1 through M-55, referring to main-line inspection, and B-1 through B-28, referring to branch-line inspections.

"I have prepared a report containing the observations recorded during the inspection and conclusions reached as to the condition of the pipe and of the coating inspected.

"The *Station No.* is the number of feet from a reference point shown on one of the company's maps to the inspection location. The *Map No.* is the number of the company's maps which includes the location. The location is also given by *Sec.* (Section), *Twp.* (Township), and *Rge.* (Range).

"*Kind of Pipe* is the trade designation indicating the method of manufacture.

"*Joint* indicates the method by which the pipe is joined to the pipes on either side.

"*Maximum Operating Pressure* is the highest operating pressure in lb. per sq. in. to which the pipe is ordinarily subjected.

"*Location Data* includes such measurements from a local point of reference as may facilitate identifying the exact place of inspection and, in addition, such descriptive matter concerning soil and other local conditions as may have a bearing on the deterioration of the pipe or coating.

"*Pipe Coating* includes the trade designation of the type of coating and a description of the appearance and condition of the coating.

"*Corrosion* includes a description of the appearance of

the pipe with special attention to where and to what extent corrosion has occurred.

"The *Section. Length Inches* is the number of inches of pipe cleaned for inspection. The section length was 36 inches in each case. The section was divided into three 12-inch sections designated A, B, and C. The pipe and coating were also inspected in the back-fill at each end of the hole.

"Under *Pit Data* are recorded the *Size* and *Depth* of the seven deepest pits in each of the three 12-inch sections. Where less than seven measurements are recorded in any 12-inch section there were only that number of measurable pits found in that 12-inch section.

"The *Size* of the pit is generally designated by a letter symbol as follows:

"MI—Minute.
"VS—Very Small
"S—Small
"M—Medium
"M-L—Medium-Large
"L—Large
"VL—Very Large
"GD—General Depression

"Under *Depth* is recorded maximum depth of the pit in inches measured by the inspector.

"Under *Remarks* are recorded any other observations which were taken into consideration on arriving at the conclusions or which were not previously covered.

"The observed per cent depreciation of the pipe (or coating) is the conclusion of the inspector as to the ratio (expressed as a percentage instead of as a fraction) of the deterioration observed at the time of the inspection to the total amount of deterioration which would render the same pipe (or coating) in new or original condition without value for the service. The reported per cent condition of the pipe or coating is the difference between 100 and the above referred to per cent of depreciation.

"At the bottom of the pipe line inspection sheet on the

right-hand side appears the name of the inspector who was responsible for the inspection and for the conclusions reached. At the left-hand side is recorded the name of an observer (or the names of two observers in some cases). The observer helped with the inspection and in many instances called to the attention of the inspector certain of the items reported by the inspector.

"Approximately five feet of pipe was uncovered at each of the inspection locations in order to provide an opportunity of inspecting the condition of the pipe and coating in more than the 36-inch sections where the pit measurements were made.

"It was observed generally that the scale coating was in a dormant or inactive condition, thus indicating that the process of corrosion was decelerating.

"Observations were made on various characteristics of the pipe and coating, such as mill roughness, mill marks, mill scale, liquor marks, tool marks, soil-stress marks, and so forth, which were present at or during construction. No consideration was given to such characteristics in determining the per cent condition of the pipe and coating except that it is my opinion that the observed per cent condition as reported of the coatings is understated, due to my taking into consideration to a certain extent, observed defects in coating which are attributable to construction conditions rather than to deterioration after construction.

"The places where the inspections were made were originally spaced so as to result in an inspection of each $20,000 of investment in pipe lines. This procedure indicated approximately 74 inspections. Additional inspection holes, however, were added at the request of the Federal Power Commission engineers, bringing the total number of inspections to 83, which resulted in an inspection for about each $18,000 investment. The location of the inspection holes were initially selected uniformly along the lines but the location of 11 holes were slightly moved to avoid such obstacles as traffic, driveways, crops, railroads, and so forth.

"In arriving at the conclusion as to the condition of the pipe inspected, I have used the same method which I cus-

tomarily use in grading or qualifying pipe for any particular service requirement. In other words, when I report a pipe to be in 90 per cent condition, for example, I mean that such pipe is in 90 per cent condition in relation to the same pipe in new or original condition, and that it would be suitable, in my opinion, for use in any service where such pipe in 90 per cent of new condition would conform to service requirements.

"It is my general conclusion that the pipe line system of this company is in excellent condition as a whole, and that the only serious deterioration which has taken place is in those few places, involving swampy ground and bad soil conditions, where the factors which cause more active corrosion are present for comparatively short lengths of line.

"I believe that my conclusion that the pipe line system as a whole is in excellent condition is substantiated by the experience of the company in respect to the 'lost and unaccounted for gas' item. At the present time, the 'lost and unaccounted for gas' of the company is approximately 60 M. c. f. per year per mile of equivalent 3-inch pipe at 100 pounds per square inch pressure, or only 1.8 per cent of the volume of gas handled.

"The arithmetical average per cent condition of the pipe and coatings at the 83 places of inspection were 93.43 per cent and 61.08 per cent respectively. The observed weighted per cent condition of the pipe lines, including pipe and coatings, based on investment data furnished to me, was 92.46 per cent."

(Vol. 24, pp. 3388-3393.)

The plant and investment data correspond to the items of property listed and classified in Exhibit 109, as reflected on the Company's books and records as to cost; and were furnished to the witness in form compiled by Mr. Willard (Vol. 25, pp. 2503, 3514-3515).

The witness identified Exhibit 108, which is the detailed report, consisting of the 83 main line and branch line inspection sheets above referred to (Vol. 24, p. 3393), each sheet of which is in the form as above described under title "Pipeline Inspection."

The witness *Hancock* further testified:

"The Wellington, Arvada and Arapahoe compressing stations have been inspected for the purpose of determining the condition of these items of property in relation to new or original condition.

"The principal classes of property in the compressor stations were inspected and the depreciation of each class of property determined separately. Special attention was given to deterioration of those parts of equipment which are subject to wear. The station piping was inspected under my direction at 16 places in the Wellington station, and 15 places in the Arvada station.

"Based on the observed depreciation reported in Exhibit No. 108, I arrived at the conclusion that the Wellington station was in 87.65 per cent condition as a whole, that the Arvada station was in 91.48 per cent condition as a whole, and that the Arapahoe station was in 100 per cent condition as a whole. The per cent condition of the individual items of property were arrived at to even percentages, and the above referred to per cent conditions to two decimal places is the result of applying the even per cent conditions to the individual items of property and arriving at the averaged weighted per cent condition for each station as a whole.

"*Measuring Stations.*

"I have made an inspection of the measuring stations of the company for the purpose of determining the present condition of these items of property in relation to new or original condition, and find that the various measuring stations of the company are substantially in a uniform condition. The observed per cent condition ranges from 94 per cent to 96 per cent; and I have, therefore, reached the conclusion that the average condition of the measuring stations may be conservatively judged to be 94 per cent.

"*Regulators, Meters and Main Line Services.*

"An inspection has been made under my direction of the regulators, meters, and main line services for the purpose

of determining the condition of these items of property in relation to new or original condition.

"The *regulators* inspected include two large regulators at the Cement Plant and the Valmont Plant, respectively, and the balance of the regulators are in use at stations not classified as measuring stations but delivering gas to small groups of customers and at various places along the main line for the purpose of delivering gas to small customers under right of way agreements.

"The *meters* covered by this inspection include all of the positive meters owned by the company, including meters of this type in measuring stations.

"The *main line services* covered by this inspection include the few small services at various places along the pipe lines.

"Considering these classes of property as a whole, I have reached the conclusion that they are in 88 per cent condition, and have based this conclusion on my inspection of the major items of property and on inspections, under my direction, of the balance of the property in these classifications.

"*Conclusion.*

"The per cents of condition referred to in the foregoing testimony have been applied to pipe lines, compressor stations, measuring stations, regulators, meters and main line services in accordance with the findings of observed depreciation, to which this testimony relates."

(Vol 24, pp. 3394-3396.)

The witness *Hancock* identified Exhibits 109 and 110, which together are the detailed report, consisting of 15 and 164 pipe inspection sheets of the Arvada and Wellington Compressor Stations (Vol. 25, pp. 3426-3428).

The detailed summary of present Per Cent Condition of main and lateral pipelines, compressor stations, and other gas line facilities of Colorado-Wyoming Company are set forth in Exhibit 107 as follows:

"Colorado-Wyoming Gas Company Per Cent Condition of Pipelines

Account 1013	Nominal Size	No. of Inspections	Average Per Cent Condition Pipe	Average Per Cent Condition Coating
Main Line	10"	19	95.6	77.9
	8"	20	93.0	55.3
	6"	16	92.9	41.3
Boulder Branch	8"	1	98.0	40.0
	6"	1	100.0	85.0
Valmont Branch	8"	2	99.0	67.5
Greeley Branch	6"	9	95.3	60.0
Johnstown Branch	6"	3	83.0	51.7
Cement Branch	6"	2	59.5	.....
Golden Branch	4"	3	99.0	70.0
Brighton Branch	3"	1	86.0	95.0
	2½"	5	97.6	94.0
Fort Lupton Branch	2"	1	99.0	95.0

"Colorado-Wyoming Gas Company Per Cent Condition of Compressor Stations

Account 1014		Per Cent Condition
Arapahoe:		
New Construction		100
Arvada:		
Buildings and Foundations		93
Air Compressors and Tanks	(2)	95
Gas Compressors (Main Units)	(6)	92
Gas Cooler	(1)	90
Gas Scrubber	(1)	92
Generator and Engine	(1)	94
Oil Tanks	(4)	90
Switchboards	(3)	96
Water Cooler	(1)	90
Water Pumps	(3)	90
Water Softener	(1)	85
Piping		89
Pipe Coating		28
Miscellaneous Equipment		88

Wellington:		
Buildings and Foundations		90
Air Compressors and Tanks	(2)	80
Gas Compressors (Main Units)	(4)	90
Gas Cooler	(1)	85
Gas Engines (Auxiliary)	(2)	80
Generator and Switchboard	(1)	85
Oil Tank	(1)	85
Scrubber	(1)	85
Water Pumps	(4)	85
Water Softener	(1)	85
Piping		80
Pipe Coating		24
Miscellaneous Equipment		85

"Colorado-Wyoming Gas Company Per Cent Condition of Other Property

Account	Other Property	Per Cent Condition
1004	Measuring Stations	94
1005	Regulators	88
1006	Meters	88
1016	Main Line Services	88"

All inspections were recorded upon a uniform printed inspection report sheet (Ex. 108-109-110) and each was filled in, in accordance with the observations and conclusions of the inspector upon his examinations at the several points of inspection (Vol. 24, pp. 3388-3393; 3394-3396).

Sheets A-6 and A-10 of Exhibit 109 (inspection of piping at Arvada Compressor Station) are set forth herein in substance, for illustrative purposes, as follows:

"Colorado-Wyoming Gas Company Pipe Inspection Report

Inspection No. A-6
Station—Arvada Compressor Station *Date*—11/24/39

Name of Line—Discharge lines from engine #6.
Date Laid—1931

Size O. D. — 4.500 *Wall Thickness* — .237 *Weight* — 10.88
Cover—20"

Kind of Pipe—Nat'l B.M. Joint—Screwed
Maximum Operating Pressure—300#

Location Data—At northeast end of gas cooler—wet ground gravel and stream sediment from mine dumps.

Pipe Coating—Originally primed—protection gone, rust stains in the soil—½" out from pipe.

Corrosion—Pitting general over all.

Pit Data— Section Length Inches—12-12-12

A. No. Side Size	A. No. Side Depth	B No. Side Size	B No. Side Depth	C So. Side Engine 6 Size	C So. Side Engine 6 Depth
L	.030	M	.040	L	.045
M	.025	M	.025	L	.055
M	.020	S	.020	L	.040
M	.035	S	.020	L	.050
M	.030	S	.040	VL	.060
M	.020	L	.025	M	.035
M	.035	M	.035	L	.025

Remarks—Pipe badly dented in #2 quadrant—section C—where chain tongs were used. Used pipe from Wellington Station—new in 1926 there.

Per Cent Condition: Pipe—74 per cent Coating—0 Per Cent
W. J. Giddings

W. L. Thackrey
Inspector."

"*Colorado-Wyoming Gas Company Pipe Inspection Report*

Inspection No.—A-10.
Station—Arvada Compressor Station *Date*—11/24/39

Name of Line—Return water line between coolers
Date Laid—1930

Size O. D.—8.625 *Wall Thickness*—.277 *Weight*—25.55 *Cover*—25"

Kind of Pipe—Republic *Joint*—Screwed
Maximum Operating Pressure—5 lbs.

Location Data—In very wet ground—South side of gas cooler just outside concrete pit.

Pipe Coating—Primer coating—light rust discolorations outside of paint—condition very good.

Corrosion—Pits scattered.

Pit Data		Section Length Inches—12-12-Collar			
A		B		C 8" Collar	
Size	Depth	Size	Depth	Size	Depth
VL	.050	VS	.040	M	.030
VL	.050	L	.025	M	.040
VL	.040	VS	.025	L	.035
VL	.040	M	.030	S	.025
S	.040	VS	.030	S	.030
M	.040	S	.025	M	.035
M	.030		.030	M	.030

Remarks—Stencil R. S. on collar .080"

Per Cent Condition: Pipe—93 Per Cent *Coating*—80 Per Cent

W. J. Giddings

W. L. Thackrey
Inspector."

The Per Cent Condition appearing on the bottom of each sheet the witness testified "is the ratio of the pressure which the pipe in its present condition is capable of withstanding without showing any distress or distortion or permanent set less the maximum operating pressure, to the pressure in pounds per square inch which the same pipe in new or original condition will stand without showing distress or distortion or permanent set less the maximum operating pressure, in the opinion of the inspector. * * * It is a judgment figure based on experience" (Vol. 25, pp. 3433-3437).

"Q. And all of this information that appears on there was before you when you finally reached the decision that you came to as to the per cent condition?

"A. That is right.

"Q. All right, what did you do after you had one of these sheets before you and the time came for you to determine

this per cent condition at the bottom of the sheet? When was that decision made?

"A. It was made at the time of the inspection.

"Q. At the time of the inspection?

"A. Yes, sir.

"Q. After all of these items had been inserted, you then made these determinations as to the pipe per cent and coating per cent?

"A. That is right.

"Q. And put them on each sheet as you finished your inspection?

"A. That is right."

(Vol. 25, p. 3436.)

Mr. Hancock also testified, the determination of per cent condition of pipe is not a mathematical calculation but is the result of a viewed depreciation of the pipe under inspection related to the condition of new or original pipe. It is ultimately a judgment figure (Vol. 25, p. 3437). Depreciation is not a function of time, although it has certain relation to time, which may be very limited, very extensive, or may have a varying relation from time to time (Vol. 25, p. 3453; See also pp. 3450-3452, 3457-3458). No consideration whatever was given by the witness in his inspections and conclusions to the date of installation of pipe or other items of property (Vol. 25, pp. 3432-3433; 3504-3505).

On cross-examination, the witness was asked and testified:

"Q. Before I overlook it, I will ask you this: Going back to Exhibit 108, if these lines, main and lateral, as set forth in these sheets, are adequately maintained how long would these lines continue to function for the transportation of natural gas?

"A. Subject to adequate maintenance and necessary replacement they would continue indefinitely."

(Vol. 25, p. 3499.)

At the instance of the Examiner, *Mr. Hancock* explained the method of digging the inspection holes and preparing the pipe for inspection, as follows:

"*The Trial Examiner:* Mr. Hancock, you made some

mention of a pick hole in the pipe as the result of digging a pit for inspection, didn't you?

"*The Witness:* Yes, sir.

"*The Trial Examiner:* I am not an engineer and this, perhaps, is rather an academic question, but would you briefly advise me as to the manner in which these pit holes are dug? What precautions are taken not to disturb the pipe as you dig down into the pit?

"*The Witness:* The inspection holes were dug by a contractor, as Mr. Davis testified to last Friday. The contractor and workmen were warned to exercise all possible care in excavating not to strike the pipe, but we saw that in a few cases inadvertently a tool did strike the pipe and it is very apparent when there is a fresh tool mark that it is a fresh tool mark, so they are easily identified as distinct from corrosion.

The Trial Examiner: Do these workmen remove all of the dirt from around the pipe or do you do that when you make the inspection?

The Witness: They remove all of the dirt from around the pipe and underneath the pipe so the inspector can get underneath to look at it.

The Trial Examiner: Can they do that without disturbing this enamel coating on the pipe?

"*The Witness:* No, the instructions were to remove the enamel coating from the 3-foot section in the center of the inspection hole, but not to disturb the enamel coating in the balance of the hole.

"*The Trial Examiner:* I see. That is, where you made your inspection as to the condition of the coating?

"*The Witness:* Yes, sir. The removal of the enamel is a very hard job. It takes quite a lot of time to get it off. It is hard and has to be chipped off and it takes a couple of workmen an hour or two to get it off, even in the 3-foot section. The final operation is with paint remover to remove the last of it, the primer coat which is underneath the enamel.

"*The Trial Examiner:* I see."

(Vol. 25, pp. 3493-3495.)

Further as to the method of inspection employed by him, he testified:

"Q. Mr. Hancock, the method of inspection that you employed in connection with the examination of main line and branch line compressor stations and other equipment, is that the standard practice employed by gas companies in determining conditions for purposes of maintenance and conditioning?

"A. As to being a determination of observed conditions, I think it is; as to the details of how the inspection is made, there is perhaps considerable variation between the methods employed by one engineer or another engineer. I have seen different engineers approach the same problem from different standpoints and usually arrive at somewhere near the same result.

"Q. In the companies with respect to whom you gave consulting advice and which you have been called upon to give such advice as to properties, is this the method you have used, not only in rate cases but in cases where the company is simply seeking facts for determining the necessary maintenance and conditioning?

"A. That is right. I felt in approaching the problem of this case, as well as other cases, I would be deceiving the Commission if I adopted a standard in determining the per cent condition for the purposes of the case which was different to the standard which I customarily employed for determining the condition of the pipe for use by the company.

"Q. And you have made no such departure in this case?

"A. I have not.

"Q. You have been accustomed to making just such inspections for many years, have you not?

"A. Yes, sir.

"Q. And this is the procedure that you follwed in such inspections over a term of years?

"A. Yes, although I should say that I believe that the accumulative experience over a period of years has been helpful in improving the appraisal of conditions which I have arrived at in this case.

"Q. You have been responsive to both experience and study in that respect?

"A. I have tried to be."

(Vol. 25, pp. 3517, 3518.)

Hancock was extensively cross-examined as to his procedure and method of inspection, and his conclusions, by detailed inquiries and answers with respect to all statements and information embodied by him in the inspection sheets (Ex. 108, 109, 110). A number of such sheets were gone over in detail by Commission counsel with the witness. Excerpts from and the substance of various portions of such cross-examination and of his direct examination are herein abstracted as follows (Vol. 25, p. 3424, *et seq.*):

The following cross-examination is indicative:

"Q. And then in arriving at your per cent condition, either pipe or coating or both, let's take Sheet 5. That shows the date laid, September 29th. 'Location Data: 65 minutes north of culvert; soil, sandy clay and loose rock, no vegetation; in shoulder of gravel road.'

"What does that indicate to you?

"A. That indicates that the place of inspection was 65 feet north of a culvert and that was put in in order to identify the location of the hole by some local landmark in addition to the station number which appears at the top of the sheet.

"Q. What does the phrase 'no vegetation' indicate to you in connection with that inspection?

"A. That indicates that there were no roots in and around the pipe which would have a particularly deteriorating effect on the coating.

"Q. In other words, where there is an absence of vegetation the coating is not as adversely affected as it probably might be if there were vegetation present?

"A. That is generally true. The effect of the roots on the coating is largely a mechanical effect. If there are large roots in the vicinity of the pipe which is covered with a thick bitumastic coating, the roots may be impressed into the coating and thereby having a deteriorating effect upon the protective value of the coating.

"Q. So that in this instance was absent in connection with that particular inspection.

"A. That is right.

"Q. And what does the phrase 'sandy clay and loose rock' indicate to you?

"A. In connection with the factors to be taken into consideration in arriving at your per cent condition, that indicates two things: First, the presence of the sandy character of the soil would be comparatively easy on pipe from a corrosive standpoint. Some of the best conditions reported on this entire inspection are in the sandy soil areas, and that is generally true over the entire country.

"The phrase as to loose rock would be of value particularly from the appraisal of the condition of the coating. The presence of rock under a heavy load of soil is quite deteriorating to a coating. The rock presses into the coating and is very hard on the coating and reduces its protective value, and that relates to the phrase below, 'heavy soil stress marks.'

"Q. That is under pipe coating?

"A. Yes, sir.

"Q. Now, this item doesn't appear on Sheet 5, but what does the fact that some amount of alkali was found in the soil at the inspection place indicate to you?

"A. The presence of alkali would indicate a certain degree of soil corrosion. The corrosion of steel pipe largely proceeds in accordance with the electrochemical theory of corrosion or at least that theory explains most of the phenomenon which we observe and the presence of alkali in the soil and in the water contained in the soil would promote the corrosive action.

"Q. Does the presence of alkali promote corrosive action more readily or less quickly if there is also moisture present?

"A. Generally speaking, there would be no corrosion in the absence of moisture.

"Q. But where there is moisture, the more moisture there is present with alkali the more apt there would be corrosion brought about?

"A. That is correct.

"Q. All right. I believe on Sheet 5 there is no indication of alkali present and the percentage condition of that pipe

line indicated is 99 per cent. On Sheet 7 under 'Location Data' it shows 'soil—sandy clay, loose rock and alkali. In shoulder of paved road. Dry on top and wet in bottom of hole.'

That shows installation date or date laid being September 1929. I see you also have a 99 per cent condition of that pipe, don't you?

"A. That is right.

"Q. Why?

"A. The bitumastic covering on inspection M-7, Sheet 7, was in much better condition than the bitumastic covering on M-5, Sheet 5.

"Q. Was that why you arrived at that conclusion?

"A. That is probably the reason for the condition of the pipe, and in turn the condition of the pipe is the reason for us arriving at the conclusion.

"Q. Well, to get to the old expression, which came first, the chicken or the egg?

"A. Of course, the corrosive condition came first. That was there before the pipe line was laid. The pipe line was then laid and the corrosive condition came next and the inspection came last?

"Q. No the per cent condition came last, didn't it? Is that correct?

"A. That is probably more correct, yes, sir.

"Q. I also note as between those two is this part of the human element that enters into it, that they are both 99 per cent condition; Sheet 5 shows two pittings, one large and one small, and Sheet 7 shows no pittings whatsoever.

"A. That is right. M-7 by strict standard of pipe appraisal should be rated at 100 per cent, but in the case of inspection in M-7 we noted that there was some mill roughness at the top and bottom of the pipe between .002 inches and .005 inches deep, and in no case where I can recall was there any indication of defects, you might say, in the pipe, have I gone so far as to give it 100 per cent condition. In certain cases I have given it 100 per cent condition where there was not only no corrosion observed at the time of inspection but there were no defects of any character.

"Q. All right.

"A. I might further explain the defects, the defects re-

ferred to being mill defects existing at the time of the original installation and they have no connection with deterioration after construction.

"Q. All right, now, let's make another comparison.

"Q. On Sheet 8 you have 99 per cent condition with quite a number of pittings, pittings generally in small area. How do you account for that close relation to per cent conditions with all of that pitting present?

"A. The depth of the pitting is almost negligible in relation to the thickness of the pipe and the effect on the strength of the pipe would in my opinion be negligible. As a matter of fact, in giving it 98 per cent I believe I have understated in the case of inspection in M-8 the condition of that pipe.

"Q. Well, now, you say that you understated it, the second time you think you understated it. How about the statements with reference to coating? Have you ever understated any of those?

"A. Yes, I have. I think I can say that on the coating I have understated it to a greater extent than I have on the pipe.

"Q. Why did you do that?

"A. Much of the protective coatings which were installed at the time of this construction were in the development stage, both as to character of material and the methods of application. In many instances we observed coating installations which were not in good condition from a protective standpoint but which in my judgment was not due to deterioration since construction but due to inferior construction as compared to present standards of construction. What I was trying to do was to relate the condition of the coating to its condition when it was installed. I have the very definite conviction that I have unconsciously as an operating man given some weight to lack of protection arising from construction difficulties when that lack of protection has not arisen from deterioration since construction.

"Q. Well, do you know, or—strike that.

"How are you able to determine at all when any of this protective coating has begun to either deteriorate or become broken or have any vegetation become imbedded in it, or when any rock or soil dents were made in the original impression?

"A. Do I understand that you are asking me how I know when that occurred?

"Q. Yes.

"A. Of course, I do not know exactly when it occurred, but having inspected a great many pipe lines of various ages and at different times during their elapsed life, I have an opinion as to that.

"As soon as the earth is back-filled and the rocks and dirt and other material in the back-fill is thrown in on the pipe and the coating, it is my opinion that the soil stress marks begin to occur very shortly. In fact, I believe they occur during the time which we call the seasoning period of the back-fill. When the back-fill seasons and becomes settled and consolidates itself with the undisturbed soil on each side of the ditch, then there is not as much weight on the pipe and the coating as there was in the original installation when the entire weight of the back-fill was pressing down or capable of sliding down and imposing its weight directly on the pipe; so I feel that the soil stress marks should in any strict appraisal of conditions be considered as part of the original construction, but in making this examination I have the feeling that I have judged the per cent condition of the coating on a basis which gives some weight to that deterioration which took place at the time of construction.

"Q. Then, as you state, in the light of your experience in judging pipe in relation to elapsed time, age, and so forth, you do have to take that into consideration to arrive at your conclusion and did do so?

"A. You merely take it into consideration in explaining what you see but not in evaluating what you see.

"Q. You take it into consideration in explaining what you see and not in evaluating what you see?

"A. That is correct.

"Q. How are you going to separate the two?

"A. That is so simple that I find it hard to explain.

"Q. You can erase the one entirely when you reach the evaluation stage?

"A. Yes. I might explain it in this way: If you emerged a piece of pipe in an acid bath and another piece of pipe in distilled water, and you went back later and inspected those pipes, you would see what the condition of the pipes was and if you knew it was acid, that would merely explain

what took place, but it wouldn't have any bearing on what you saw as having taken place. You could make the same observation on the condition of the pipe if you didn't know what took place.

"Q. But you did have before you and took into consideration for your observation, as you say, the factors with reference to the age, or, rather, the date and length of time these sections of pipe with that coating had been in place and in service?

"A. We knew, of course, the date when the pipe had been installed. In fact, it may have been on the sheets, probably was, but even if it hadn't been on the sheets we knew when the pipes were installed.

"Q. All right, now, going back to your past experience in connection with making similar inspections, I wish you would explain exactly what factor with reference to elapsed period of time during which the particular service or line was installed, you gave consideration in so far as the first step of your inspection was concerned, and where did you stop giving consideration to it?

* * * * * *

"Q. None? Then why did you say in connection with your past experience you gave consideration to the elapsed period of time the service had been installed?

"A. I testified that I gave no consideration to the elapse of time in arriving at the conclusion, because depreciation is not a function of time. I stated that we knew what the lapse of time was as a matter of interest, and as a possible explanation why the particular conclusion was arrived at.

"Q. As a possible explanation?

"A. Yes, sir.

"Q. And what did you say you found depreciation to be? Not the function of time?

"A. Depreciation is not a function of time.

"Q. It is not and it has no relation whatsoever to the element of time?

"A. Yes, it has a certain relation but it is not a direct function of time.

"Q. In what respect does it have an indirect relation or what relation does it have?

"A. It may have a very limited relation; it may have a very extensive relation, and it may have a varying relation

from time to time. For example, if a piece of pipe was in service under ideal conditions, buried in dry sand or under some other condition where the corrosive action was extremely slow or absent, time would have a very slight relation to depreciation of that pipe. On the other hand, if it was in a corrosive soil and a wet soil, the longer the time it was exposed the more the depreciation would be; however, even in the latter set of circumstances which I have just described, there might be variations in the intensity of corrosion; there might be and are dry periods and series of dry years; there might be changes in the cathodic protection of the line; there might be changes in earth currents from electric railway systems; there might be changes in drainage conditions; there might be and are other pipe lines or other underground structures laid in the vicinity, which would have an effect on the pipe line which I am using as an example.

"Q. What consideration did you give this in your determining of the per cent condition?

"A. None."

(Vol. 25, pp. 3444-3454.)

Referring to one particular inspection in which the witness gave a 95% condition to the coating and a 99% condition to the pipe itself, he was asked by counsel for the Commission to explain such a result, which he did as follows:

"A. That is a very usual conclusion to arrive at, which I will explain if you want me to.

"Q. All right.

"A. My pipe line is installed, protected with bitumastic or similar hot enamel coating; it goes through several phases of deterioration. The first phase consists of a deterioration of the coating and if the coating is good or fairly good, the pipe deteriorates very little during the first phase.

"The second phase of deterioration following the breaking down of the coating or the disappearance of the coating, will consist of more rapid deterioration of the pipe.

"The third phase will consist of a slowing up of the pipe deterioration due to the protection gained from the deposition of the product of corrosion on the surface of the pipe

and providing a certain protective coating for the pipe. When a pipe becomes covered with a heavy scale coating the scale coating consisting of iron oxide and portions of the soil which are in that immediate vicinity, it slows up the process of corrosion to a considerable extent.

"Q. Well, your element of time comes into the picture again, doesn't it?

"A. As merely explaining what happened.

"Q. As merely explaining what happened?

"A. Yes, but not necessarily being a direct function of what happened."

(Vol. 25, pp. 3456-3457.)

Also on cross-examination, to test the witness, he was given, first, Sheet A-6 and later Sheet A-10 of Exhibit 109, to recalculate on the witness stand the per cent condition of the pipe shown on these two sheets, from the sheets themselves. The lower portion of the sheets, containing the per cent condition entered thereon by the witness at the time of his inspections was in each instance folded under, so that the witness could not see the inspection report of per cent condition previously made by him. The witness, on re-examination of the sheets in question, gave on his recalculations figures practically identical with the figures entered upon his original inspections. The per cent condition of pipe originally entered on Sheet A-6 was 74 per cent, and as given on his recalculation on the witness stand was 72 or 73 per cent. The per cent condition of pipe reported originally on Sheet A-10 was 93 per cent, and as given when recalculated during the hearing was 93 or 94 per cent (Vol. 25, pp. 3521-3522, 3524-3525).

As to the inspection and determination of present per cent condition of the buildings, foundations, machinery and equipment, at the Wellington and Arvada Compressor Stations (Ex. 107), such inspections and determinations were made by the witness Hancock personally, beginning November 19, 1940 (Vol. 25, pp. 3501, 3516-3517).

He testified, on cross-examination, in arriving at the per cent condition of building and foundations of the Wellington Compressor Station, he examined the exposed portion of the foundation, steel work in the frame of the building, steel

sheets covering the building, and the paint, and gave the entire structure, including the foundations, a single over-all per cent condition (Vol. 25, pp. 3496-3498). The same method was used in connection with the Company cottage at Wellington, after inspection of foundation, siding, shingles, porches, general construction and general condition (Vol. 25, pp. 3499-3500).

With respect to the compressor station equipment, in addition to personal observation and examination he considered certain operating data made available to him with respect to the wearing parts in the equipment at the Wellington and Arvada stations. This information consisted of measurement of the extent of wear on wearing parts and was obtained from the station records. It is kept on a diagram of the power and compressor cylinders showing the extent of wear on the top and bottom and front and back of each cylinder (Vol. 25, pp. 3433-3434).

Hancock, engineering consultant of the Company since its organization, testified he did not participate in or have knowledge of the determination in New York of the annual accruals to be entered on the Company's books under the Reserve for Depreciation (Vol. 25, p. 3470).

Cross Examination.

By Mr. Lange:

Q. Mr. Hancock, what is your present position with the Gas Advisers, Inc.?

A. President.

Q. President?

A. Yes.

Q. And where does Gas Advisers, Inc. have its office?

A. 60 Wall Tower, New York City.

Q. 60 Wall Tower, New York City?

A. Yes.

Q. Exactly what is the difference in character of service that Gas Advisers, Inc. renders in comparison with Petroleum Advisers, Inc.?

A. There is no difference in the certain classes of services rendered but there is a difference in other classes. The accounting, purchasing, financial, budgetary, and services of that character are rendered in substantially a similar

manner by the Gas Advisers, Inc. and Petroleum Advisers, Inc. The geological services, for example, are rendered by Petroleum Advisers, Inc., it having a geological staff, and when the Gas Advisers, Inc. desire to furnish geological services to member companies it calls on Petroleum Advisers, Inc. to furnish the personnel required to render that service. It is the same way when Petroleum Advisers, Inc. desires or is required under its contract to render gas engineering service to a member company and having no gas engineering department or staff of its own, it employs Gas Advisers, Inc. to render that portion of the service to its member companies.

Neither Gas Advisers, Inc. or Petroleum Advisers, Inc. maintain a staff of inventory and valuation experts. For that reason when such services are required by the member companies of either Gas Advisers, Inc. or Petroleum Advisers, Inc., Electric Advisers, Inc., is called upon to furnish that class of service.

Q. Now, in connection with this present proceeding, which companies supply the personnel for the rendering of services?

A. Petroleum Advisers, Inc. supplied the personnel indirectly through Gas Advisers, Inc. or by calling on Gas Advisers, Inc. to supply the personnel. It is in regard to the gas engineering service I am referring to.

Q. You are President of Gas Advisers, Inc., aren't you?

A. That is right.

Q. What position, if any, do you hold, first of all with the Petroleum Advisers, Inc. and the Electric Advisers, Inc.?

A. None.

Q. Do you hold any official position with any other company?

A. Yes.

Q. Which company or companies?

A. Some of the operating companies.

Q. Can you give us the names of the operating companies?

A. Yes.

Q. Please do that.

A. Arkansas-Louisiana Natural Gas Company—

Q. And the position you hold in each company as you name it.

A. You mean by that as to whether I am an officer or not?

Q. As to whether you are an officer or director or have any official position.

A. Arkansas-Louisiana Natural Gas Company, Vice President and Director; Arkansas Natural Gas Corporation, Director; Wentworth Natural Gas Corporation, Director; Republic Light, Heat & Power Company, President and Director; the Dominion Natural Gas Company, Ltd., Vice President and Director; United Gas and Fuel Company, Ltd., Director; Hamilton Byproducts and Coke Company, Ltd., Director; Suburban Gas Company, Director; United Fuel Investments Company, Director; Penn-York Natural Gas Corporation, Director. That is all.

Q. Now, the three companies, Petroleum Advisers, Inc., Gas Advisers, Inc., and the Electric Advisers, Inc., are the successor companies which were originally Henry L. Doherty & Company? Is that correct, or exactly what is the status of it?

A. They are not successor companies. They were newly organized and formed companies as of January 1938 for the purpose of performing some or all of the servicing duties performed by Henry L. Doherty & Company as fiscal agent of Cities Service Company prior to the fall of 1935, and performed directly by Cities Service Company from the fall of 1935 to January 1, 1938.

Q. Now, then, what is the affiliation that exists between those three companies and the member companies, the so-called member companies?

A. The relationship?

Q. The corporate affiliation.

A. As to Gas Advisers, Inc., the entire capital stock is owned by the member companies, it being a mutual service company as defined in the Public Utility Holding Company Act of 1935.

Q. What are the member companies in that group?

A. The Kansas City Gas Company, the Wyandotte County Gas Company, the Gas Service Company, the Arkansas-Louisiana Gas Company, the Republic Light, Heat & Power Company, and the Dominion Natural Gas Company, Ltd.

Q. Which of those companies are subsidiaries of Cities Service?

A. The Dominion Natural Gas Company and the Republic Light, Heat & Power Company are direct subsidiaries. The Arkansas-Louisiana Natural Gas Company is a subsidiary of the Arkansas Natural Gas Corporation which is in turn sometimes called a subsidiary of Cities Service Company. The Kansas City Gas Company, the Gas Service Company, and the Wyandotte County Gas Company are not subsidiaries of Cities Service Company in the sense that Cities Service Company has any voting control over the stocks of these companies, these stocks being trusted.

Q. Where the trusteeships exist, what is the nature of the relation of the trusteeship in so far as Cities Service Company is concerned? What is the nature of that trusteeship?

A. That was an arrangement made entirely by Cities Service Company and I had nothing to do with it.

Q. You don't know where the beneficial ownership of the stock rests?

A. No, sir.

Q. When was that arrangement made? Was it after 1935?

A. Yes, sir.

Q. What was the purpose of that arrangement?

A. I have no idea—I will amplify that. I might say I have hearsay knowledge of it.

Q. What do you know about that?

A. I know nothing of record about it.

Q. You say you don't know anything of record about it. What do you know about the resaon for that?

A. I know nothing about the reason at all.

Q. Nothing at all?

A. No, sir.

Q. What about the other group the Petroleum Advisers, Inc.? Which are the member companies in that group?

A. I will try to name some of them. I am not concerned with the operation of that company and hence I am not entirely familiar with it, but I do know that Cities Service Company of Pennsylvania, Cities Service Oil Company of Delaware, Power Patents Company, Arkansas Fuel Oil Company, Arkansas Pipe Line Company, Cities Service Gas Company, Colorado-Wyoming Gas Company, Penn-

York Natural Gas Corporation, are member companies, and there are perhaps some other companies which I cannot recall just at the moment.

Q. And of those companies which are subsidiaries of Cities Service in the Cities Service group?

A. They are all subsidiaries, either directly or indirectly. (Vol. 24, pp. 3397-3403.)

* * * * *

Q. Now, Mr. Hancock, referring to Exhibit No. 107, on what page do you refer to the reports included in Exhibit No. 108?

A. Page 9.

Q. Page 9?

A. Yes, sir, at the top of the page.

Q. And the report that you have as reflected in Exhibit No. 108 includes what items—rather, what does that report embrace?

A. The property which is covered by the inspections reported in Exhibit No. 108 includes the main lines and branch lines of the company.

Q. And those inspections, as you have just stated, were made between September 18, 1939 and September 27, 1939?

A. That is correct.

Q. And the way you went about making that report is partly reflected on Page 6 of Exhibit No. 107 where you give the definitions of these various abbreviations used in connection with determining pit depths?

A. That is right.

Q. Those are at the present reflected on each of the sheets, 1 through 83 of Exhibit No. 108?

A. That is right.

Q. All right. Let us, for instance, take your first sheet on Exhibit No. 108. Inspection M-1, exactly where is that particular section of the pipe line?

A. That is on the extreme south end of the pipe line.

Q. Can you indicate the termini of those pipe ends that are included in that inspection?

A. The inspection is 4,150 feet west of the beginning of the Colorado-Wyoming Gas Company's pipe line system at Arapahoe measuring station.

Q. Where does it end? It begins right immediately west of the Arapahoe station and ends where?

A. Well,—

Q. Forty-one hundred and—

A. My answer is that the point of inspection was 4,150 feet west of the Arapahoe measuring station.

Q. That is the point of inspection, but what section of the line is encompassed in that inspection?

A. Three feet.

Q. At what section of the line did you—strike that.

What proportionate part of the investment did you attempt to encompass in that inspection?

A. As testified previously, each inspection hole represents approximately $18,000 of investment.

Q. And can you approximate the distance along the line that that would be on this particular section?

A. On the 10-inch main line the distance between inspections is approximately 8,300 feet.

Q. Approximately 8,300 feet between inspections?

A. Yes, sir.

Q. What is the difference between inspections on the next section of the main line, the 8-inch main line?

A. On the 8-inch main line it is approximately 11,500 feet.

Q. Approximately 11,500 feet between inspection points?

A. The distances which I have just given you are the distances arrived at in the original schedule of inspection and we departed from them to some certain extent for reasons explained in previous testimony.

Q. That is right. Now, the 6-inch main line?

A. The 6-inch main line, the distance between inspection points is 13,500 feet.

Q. 13,500 feet?

A. Yes.

Q. And that takes care of all the main line distances, doesn't it?

A. Yes, sir.

Q. Now, with reference to the laterals?

A. The same spacing would be applicable to the 8-inch and 6-inch laterals as has been testified to in regard to the spacing on the main line. The 4-inch laterals the spacing between inspection points would be approximately 19,700

feet. I don't have a note before me regarding the spacing on the smaller sized lines.

Q. And the total inspections made of the main line, as well as laterals, included in Exhibit No. 108, are 83 in number?

A. Correct.

Q. That is, there are 55 inspections covering the main line? Is that correct?

A. Yes, sir.

Q. And the remaining 28 cover the laterals, is that correct?

A. Correct.

Q. Now, then, going back to Sheet 1 again, I notice that on every one of the sheets, Sheets 1 through 83, is a printed item "Date Laid" after which in each instance a month and year has been inserted is that correct?

A. Yes, sir.

Q. I understand that you did not take into consideration the time of installation of any of these various sections of pipe, or did you?

A. I did not.

Q. You did not take that into consideration?

A. No, sir.

Q. Well, now, the material that is included in this sheet, as I understand it, had a definite purpose, did it not, in enabling you to arrive at your final conclusion in each instance?

A. Not all of it.

Q. Why was it necessary to have the date of installation or date laid, as you put it, on each of these sheets if that particular information was not taken into consideration in the arriving of your conclusions in each instance?

A. I thought I might be asked what the date was.

Q. You thought you might be asked what the date was?

A. Yes, sir.

Q. That is the only purpose it had in being included in this sheet?

A. Yes, sir.

Q. And you gave no consideration to the time of installation or the time that that piece of line has been in service?

A. No consideration whatsoever.

Q. None whatsoever?

A. No, sir.

Q. And is that same situation true with reference to the same character of information on the sheets in Exhibit No. 109, your compressor station equipment?

A. It is.

Q. And didn't you state Friday that you didn't just observe the compressor station physically but gave consideration to certain operating data that you made available to yourself on that particular item of equipment?

A. That is correct, as to wearing parts.

Q. As to wearing parts?

A. Yes.

Q. Where did you get that information and what did it consist of?

A. It consists of measurement of the extent of wear on wearing parts and was obtained from the station records.

Q. Obtained from the station records?

A. Yes, sir.

Q. In what form is that information kept at the station?

A. It is kept by the superintendent of the station.

Q. In what character of record book?

A. It is kept on a diagram of the power and compressor cylinders showing the extent of wear on the top and bottom and front and back of each cylinder.

Q. And that record also gives the installation date or dates, doesn't it?

A. I don't believe it does.

Q. Where did you get this information that you have on the sheets in Exhibits Nos. 109 and 110?

A. As to pipe lines?

Q. No, these compressor stations listed on the sheets in Exhibits Nos. 109 and 110.

A. As to pipe lines or the compressor station?

Q. Exhibit No. 110 as to the pipe line and compressor station.

A. That was obtained from the company records in the Denver office.

Q. The company records in the Denver office?

A. Yes.

Q. And going back to Exhibit No. 109, the Wellington compressor station, the date on there was obtained from the station records of the company?

A. That is right.

Q. And that item was put in—or on each of these sheets at the time these other items were put on each of these sheets, was it not?

A. Not necessarily.

Q. Well, it appears from the copies that I have that these apparently were made at the same time. What was the practice that you followed in compiling these sheets?

First of all, in Exhibit 108, was all of this information that appears on this sheet, aside from the printed part, was that inserted at one time until you got down to "Per Cent Condition"?

A. I think so, yes.

Q. And then in each of these instances you had charge of or supervised the preparation of each of the sheets, didn't you?

A. Correct.

Q. And in connection with—well, let's take the first one. You didn't appear on that one, but you had supervision over the preparation of that one, didn't you?

A. That is right.

Q. And all of this information that appears on there was before you when you finally reached the decision that you came to as to the per cent condition?

A. That is right.

Q. All right, what did you do after you had one of these sheets before you and the time came for you to determine this per cent condition at the bottom of the sheet? When was that decision made?

A. It was made at the time of the inspection.

Q. At the time of the inspection?

A. Yes, sir.

Q. After all of these items had been inserted, you then made these determinations as to the pipe per cent and coating per cent?

A. That is right.

Q. And put them on each sheet as you finished your inspection?

A. That is right.

Q. What mathematical relation does; for instance, this percentage of 99 per cent on Sheet 1, have to the information that appears above it?

A. The 99 per cent appearing on Sheet No. 1 of Exhibit 108 is the ratio of the pressure which the pipe in its present condition is capable of withstanding without showing any distress or distortion or permanent set less the maximum operating pressure, to the pressure in pounds per square inch which the same pipe in new or original condition will stand without showing distress or distortion or permanent set less the maximum operating pressure, in the opinion of the inspector.

Q. In other words, the percentage of 99 per cent pipe condition is purely a judgment figure ultimately? It is not calculated out?

A. It is a judgment figure based on experience.

Q. Based on experience?

A. Yes.

Q. It isn't the result of a mathematical calculation?

A. It is the result of a viewed depreciation of the pipe under inspection related in the opinion of the inspector to the condition of new or original pipe.

Q. But, as I say, it is ultimately a judgment figure?

A. It is a judgment figure.

Q. And the same applies to the coating per cent?

A. That is right.

Q. On this page, as well as on the others in that exhibit?

A. It is a judgment figure.

The Trial Examiner: Pardon me a moment, Mr. Lange. Do I understand, Mr. Hancock, that this per cent figure here, for example, on Sheet 1 of Exhibit 108, represents the per cent of condition figure fixed by the inspector?

The Witness: That is right.

The Trial Examiner: That is not your figure?

The Witness: In this particular case it was fixed by Mr. Stoddart.

The Trial Examiner: I see.

The Witness: Who was working under my direction and who accompanied me on all the other inspections which I made.

The Trial Examiner: All right.

By Mr. Lange:

Q. In each instance the inspector affixed those percentages on the sheets?

A. That is right.

Q. And in a number of instances that was done by Mr. F. W. Stoddart?

A. That is right.

Q. And in a great many of those instances you were not marked present as an observer?

A. That is right.

Q. In what fashion then, were you able to check the accuracy of his conclusion?

A. In the first place, he worked under my direction, and followed the methods and procedures which I outlined. In the second place, both Mr. Stoddart and I have worked together on many previous inspections and on basic tests of pipe line material on which we ground our judgment as to the conclusions presented in this report.

Q. Well, then, if you were not present at any of those—strike that.

At any of those inspections at which you were not present, did you ever reach any different conclusion as to per cent condition than that arrived at by Mr. Stoddart?

A. No, sir.

Q. You did not?

A. No, sir.

Q. In what fashion did you go over any particular sheet? Let's take one where you weren't present. Let's take the first one. You weren't present at that inspection?

A. No, sir.

Q. What did you do in order to satisfy yourself that 99 per cent for pipe and 95 per cent for the coating correctly reflect that condition?

A. I examined and studied the sheet and saw nothing in the report of corrosive conditions and measurements of pits which would lead me to arrive at a different conclusion. I am not able to check an inspector's conclusion exactly by reason of a written report, but I believe that I could detect any wide deviation from what I believed it to be the correct conclusion, and I have concluded in this instance that Mr. Stoddart's judgment as to these per cent conditions is substantially in agreement with my own.

Q. All right, would you be able, for instance, to take one of these inspection sheets—strike that.

Would you be able to take one of these inspection sheets at which inspection you were not present, eliminate the date laid as well as the pipe per cent and the coating per cent, and arrive at a per cent condition of the pipe and coating?

A. I believe I could with certain limitations in mind.

Q. What limitations?

A. I could probably not arrive at the same conclusion to a high degree of exactness on individual inspections, but taking a number I would probably arrive at very close to the average.

Q. Taking a number?

A. Taking a number.

Q. Didn't you state that each of these inspection sheets stands on its own bottom and the per cent condition is arrived at by the inspector right then and there?

A. That is right.

Q. Standing on its own?

A. That's right, but in attempting to check against another inspector, both of us being human, I believe that my judgment would differ perhaps in one direction in one test and in another direction in another test, and probably on the average would come closer than on individual tests, although it may come fairly close even on some individual tests.

Q. Just may happen to strike that way?

A. Yes, or it may be a little high or a little low.

Q. Well, how about one that you yourself have made where the date laid as well as the per cent of pipe and per cent of coating were eliminated? What would you be able to do with one of those?

A. The same answer applies.

Q. In other words, in that situation, then, you could not take that one inspection sheet and arrive at your per cent condition with the accuracy that you say you have on that particular inspection sheet?

A. No. I believe I could arrive at a more accurate determination with the pipe in front of me than I could with

the description in front of me, but I could do it with a fair degree of accuracy with only the description.

Q. With only the description?

A. Yes, on the average.

Q. You would have to have how many of these in order to average out?

A. You would get the closest average by taking all of them and a corresponding chance of not averaging by taking any number which is less than the total.

Q. Very well. Here is one in Exhibit 110. That is on the Arvada compressor station. What is the per cent condition of that in the absence of any information as to the time laid or the per cent condition indicated by you?

A. All right, sir, give me about five minutes and I can give it to you.

The Trial Examiner: Mr. Lange, can you proceed with some other line so that Mr. Hancock might make that calculation at the usual recess?

Mr. Lange: Very well.

Q. Now, with reference to the statement that you just made on the pipe line inspection where you did not make the inspection but would have to check it yourself—let's take Sheet No. 5 on Exhibit 108. Before we go into the matter of the per cent condition or any other factor on that sheet, I want to ask you this general question:

What character of information was available to you as to the soil conditions that you have under, "Location Data" on this sheet?

A. The observation of soil conditions is recorded on each inspection sheet under the caption of "Location Data".

Q. And what consideration did you give to that in arriving at your per cent condition?

A. None.

Q. None?

A. None.

Q. Well, then, that is another item that is unnecessary on each of these sheets?

A. That is right.

Q. Well, why?

A. It is unnecessary from some standpoints.

Q. From what standpoints?

A. From the standpoint of arriving at the conclusion of the condition of the pipe.

Q. Well, then, why has it been put in this inspection sheet in each instance?

A. Because I wanted to know as I made this inspection, what factors had contributed to the condition of the pipe as observed. That is very useful information.

Q. What factors had contributed?

A. Yes, sir.

Q. Over what period of time?

A. I wouldn't know what period of time.

Q. Would there be any way for you to limit the time that those factors had contributed?

A. No, sir.

Q. And that is the purpose of your including location data with reference to soil conditions and other items under that particular heading in these sheets?

A. That is right.

(Vol. 25, pp. 3428-3444.)

Q. Now, then for instance, on Sheet 18 where you have arrived at 99 per cent condition, the Location Data there speaks of "sandy loam soil—in low ground near small stream—water in hole. Pumping during inspection—heavy back-fill." That is a pretty bad location, not just spasmodic, isn't that true? Doesn't it indicate to you just a spasmodic location?

A. No, not a spasmodically bad location. I might explain it in this way: It is probably in this location fairly permanently wet—

Q. That is right.

A. —and it is a very deep point, being 55 inches from the top of the ground to the top of the pipe. In all probability there is a greater exclusion of oxygen from the pipe line in this location than in many of the other locations. It is also probable that more care was given in installing the protective coating at this point, and that is evidenced by the fact that there were no rust stains evident under or over coating, or in the soil, which would indicate that at that point we did not observe what we call holidays in the coating, which were observed at many other points.

Q. What do you mean by "holiday" in that particular phrase?

A. It might be described as a pin hole through the coating.

Q. Caused by what?

A. Caused by gas bubbles or something like that at the time of the original installation, in which, as previously testified to, we have rated the coating down when we observed the rust stains over the coating, when as a matter of fact these pin holes or holidays undoubtedly occurred at the time of installation.

Q. You have rated this coating down in spite of the fact that none of them appear? "Bitumastic—good general protection—no rust stains evident under or over coating or in soil."

A. The rating down comes from the part you have omitted.

Q. "Heavy soil stress marks"?

A. That is right.

Q. Were any of those penetrated?

A. I can't tell from this brief description, but it is very probable that some of the soil marks or rock marks penetrated quite deeply into the coating.

Q. But you have a very good condition there?

A. That is right.

Q. And you still only gave it a 95 per cent condition?

A. That is right.

Q. And why did you give that as low a per cent condition with reference to the coating there and a 99 per cent condition with reference to the pipe that has been installed—strike out "installed"—that has been in place in that low ground?

A. That is a very usual conclusion to arrive at, which I will explain if you want me to.

Q. All right.

A. When a pipe line is installed, protected with bitumastic or similar hot enamel coating; it goes through several phases of deterioration. The first phase consists of a deterioration of the coating and if the coating is good or fairly good, the pipe deteriorates very little during the first phase.

The second phase of deterioration following the breaking down of the coating or the disappearance of the coating, will consist of more rapid deterioration of the pipe.

The third phase will consist of a slowing up of the pipe deterioration due to the protection gained from the deposition of the product of corrosion on the surface of the pipe and providing a certain protective coating for the pipe. When a pipe becomes covered with a heavy scale coating the scale coating consisting of iron oxide and portions of the soil which are in that immediate vicinity, it slows up the process of corrosion to a considerable extent.

Q. Well, your element of time comes into the picture again, doesn't it?

A. As merely explaining what happened.

Q. As merely explaining what happened?

A. Yes, but not necessarily being a direct function of what happened.

Q. Well, you distinguish between direct relationship and indirect relationship? To what extent is that present, that indirect relationship to the time element?

A. I don't believe I understand your thought.

Q. What consideration did you give to the time element?

A. None.

Q. None whatsoever?

A. None whatsoever.

Q. What about the factors that you just related as bearing indirectly?

A. I gave them no consideration in arriving at the conclusion as to per cent condition.

Q. Well, you say that situation obtaining on Sheet 18 is usual. What about the situation that obtains on Sheet 77 where you have just the reverse? You have given that pipe an 86 per cent condition with almost a perfect coating per cent. In fact, you gave that an excellent condition. That should really be 100 per cent as far as pipe coating, noting Sheet 77?

A. No, sir, I didn't rate any of them 100 per cent.

Q. You didn't give any of the coating percentages as much as 100 per cent?

A. I did not.

Q. You did give some of the pipe percentages 100?

A. I did.

Q. You didn't think each of these coating ratings where you have—like on Sheet 77 "Barrett hot enamel. Good coverage—good adherence—soil stress marks," is that what you say pulled down that rating?

A. Yes, sir.

Q. And otherwise you would have given it a 100 rating? Nothing else pulled that down, did there?

A. If it had been perfect I would have given it 100 but I didn't consider it was.

Q. You did consider some stress pipe section per cents, for instance, Sheet 81, where you give that pipe 100 per cent condition?

A. I did consider the per cent.

Q. You did consider the per cent?

A. Yes, sir.

Q. But you didn't consider any of the coating per cent?

A. Because they were not—

Q. Not a one?

A. No, sir. Many of them were zero.

Q. That is true, but I am talking about having given pipe sections 100 per cent condition and not a single of the coating ratings were 100 per cent, although in some instances there weren't any marks present at all.

A. I don't believe I recall any case—there might have been some isolated cases—but as a general rule, there were marks on the coatings.

Q. All right. You have indicated those as soil stress marks and so forth?

A. Yes, sir.

Q. Sheet 83 gives pipe coating as "Barrett hot enamel—good adherence—complete coverage. No rust under coating or in soil. Excellent condition." That only has 95 per cent, although the pipe is 99 per cent?

A. That is right.

Q. You still think there wasn't a single instance where the coating was entitled to 100 per cent condition?

A. No, I don't believe there was.

Mr. Lange, I don't believe I have finished my answer to your question on Sheet 77.

Q. Very well.

A. That is where you call attention to the fact that the coating was in better condition than the pipe.

Q. Yes.

A. Under the caption "Corrosion" there is the statements "Pits general in medium areas. Paint in bottom of pits," which would indicate that the pipe was pitted before

it was painted; that it was a piece of used pipe accounts for the fact that the coating is in better condition than the pipe, which, of course, would be an impossible condition if both had been installed at the same time.

Q. How did you, without having any of the history of that section, know that that was a piece of secondhand pipe or a section of secondhand pipe?

A. The paint was in the bottom of the pit.

Q. The paint was in the bottom of the pit?

A. Yes.

Q. Is that the way you ascertained that fact?

A. That is a very reliable method.

Q. Is that the way you ascertained it on Sheet 78, or did that indicate such a situation?

A. Sheet 77 was the one I was referring to.

Q. Yes.

A. And it is the one which I understood was the basis of your question, wasn't it?

Q. That is right. That has a statement under "Corrosion" like this: "Paint in bottom of pits." Is that the reference you are discussing?

A. That is right. The whole situation was undoubtedly more clearly discernible to the engineer when he was looking at it than this indicates, but that is a very clear indication to me that that was in his mind when he made the report because that situation occurs very frequently.

The Trial Examiner: We will stand in recess for five minutes.

(At this point a short recess was taken, after which proceedings were resumed as follows:)

The Trial Examiner: The hearing will be in order.

By Mr. Lange:

Q. Mr. Hancock, on Sheet No. 1, going back to Sheet 1 of Exhibit No. 109, you say that 99 per cent condition of the pipe there is because of—strike out "the"—of what factors?

A. Because of the corrosion. It indicated isolated shallow pits.

Q. And even with that many shallow pits, 99 per cent condition of the pipe would reflect the correct condition?

A. That is correct.

Q. How about Sheet 22 where you haven't any pitting at all and still have a 99 per cent condition?

A. That is right. The shallow pitting on M-1 on Sheet 1 results in an almost negligible effect on the condition of the pipe. The condition of the pipe on M-22, Sheet 22, is rated at 99 per cent and is so rated because of the reference to small patches of mill roughness. The pipe is not in perfect condition but we could find no evidence of corrosion.

Q. Going back to Sheet 77 where you indicated under "Corrosion"—"Paint in bottom of pits," you say you had no information before you with reference to that pipe as to whether it was new or secondhand, but you presume it was secondhand; is that what you said?

A. That is right.

Q. You did not know as a matter of fact, that it was secondhand, that as well as those through Sheets 83?

A. I cannot say as to Sheet No. 83.

Q. Why?

A. Because I have nothing to enable me to say.

Q. Why, as to Sheet 82? I don't see any paint marks in your corrosion statement there.

A. I didn't say as to Sheet 82, but I will if you want me to.

Q. Well, what is your knowledge with reference to that? There is no paint marks shown on your corrosion statement there, are there?

A. No, sir.

Q. Well, if that was secondhand pipe, why wasn't that same indication as to paint at the bottom of the pits present?

A. You are referring to Sheet 82?

Q. Yes.

A. I don't recall that I said it was secondhand pipe as to Sheet 82.

Q. No, but I say, if it as a matter of fact were secondhand pipe, would there be any explanation under corrosion that would indicate that?

A. Well, it has a new pipe appearance. Now, whether it has been moved in location or not, I can't say, but regardless of what its history has been it presents the appearance of new pipe. I am now referring to Sheet 82.

The Trial Examiner: I don't believe, Mr. Lange, that Mr. Hancock got your original question with regard to the secondhand pipe. Would you mind restating that?

Mr. Lange: Yes.

The Trial Examiner: You named the sheets there.

Mr. Lange: Yes, Sheet 77.

Q. On Sheet 77 you give an explanation with reference to corrosion that paint in bottom of pits indicated to you that the pipe was not new pipe when laid.

A. That is correct.

Q. And why would that indicate to you that that was not new pipe when laid?

A. Because that condition wouldn't be present if the corrosion that we observed had occurred after the pipe was painted and laid.

The Trial Examiner: That was not the question I had reference to, however, Mr. Lange.

Mr. Lange: Oh, I think the one you have in mind was the question I asked whether he knew as a matter of fact—

The Trial Examiner: That's right.

Mr. Lange: —that the sections of pipe included in Sheets 78, 79, 80, 81, 82 and also 83, also covered secondhand pipe.

The Witness: It is my understanding that the Brighton, B-r-i-g-h-t-o-n, branch generally was constructed of used pipe. However, that does not mean that the used pipe, or, rather, the pipe which we inspected at each of these locations, was necessarily the original used pipe installed in this line. There may have been replacements of certain sections of pipe.

By Mr. Lange:

Q. Well, if they were replacements, what *affect* would that have on your giving consideration to the period of time that any particular piece of pipe was located in certain soil or under certain conditions, or all items that go under location data?

A. The question of possibility of replacements is just another reason why, when looking at a line which was laid in a certain year, that there can be no conclusion drawn that the pipe you are looking at was necessarily laid in that year.

Q. All right, then, how do you arrive at these three stages of corrosion that you were just speaking about? What period of time do you allocate to them?

A. I have never allocated any. That would be an impossible undertaking.

Q. Well, what period of time, then, is it attributable to each stage?

A. I don't know.

Q. Well, when does any particular time come about when they decelerate, as you say?

A. That can only be arrived at by observation as to the time when it takes place, depending on the particular conditions which exist at that place.

Q. Well, do you attempt to make a determination on an inspection as to whether the period of time has arrived or elapsed when the deceleration begins to take place with reference to corrosion?

A. No, sir, and I do not for this reason: That as soon as we know when a pipe was installed and are sure that we are now identifying the particular pipe which was installed, we now observe certain corrosion or pitting in that pipe and we look at the records and see when that pipe was installed, but so far as I know, we do not know when that corrosion started. We know when the pipe was back-filled and we know when we stuck a pick in the back-fill to dig it up to take a look at it, but we don't know when the pit started.

Q. No, but you did have to know when that pipe was installed to begin your follow-through study on that particular section of pipe?

A. No, sir.

Q. Oh, you did not?

A. No, sir.

Q. You just related that beginning with the assumption that the pipe was installed at a certain time—

A. Yes, but I meant in my answer that we did not have to know when the pipe was installed in order to arrive at the per cent condition at the present time.

Q. Well, when you did, though, assume that date for what purpose, assume the knowledge of the time of installation for what purpose?

A. As a matter of operating and maintenance information.

Q. Well, you didn't prepare this study, or did you, as a matter of operating and maintenance information?

A. Yes, those items of information are generally obtainable at no other times than these inspections for this purpose and they are very expensive to make; so naturally in the interest of economy we obtain all the information that we can at the time of the pipe line inspection for this purpose.

Q. At the time of the pipe line inspection for this purpose, in rate proceedings, are made?

A. Yes, sir.

Q. Well, then, how do you get that information when you don't have any rate case and don't have any occasion to make such pipe inspection?

A. We have to spend the money to get it.

Q. You have to spend the money to get it?

A. Yes.

Q. How do you go about getting it?

A. Dig up the pipes and looking at it.

Q. When did you do that on this system?

A. For the purpose of this inspection?

Q. Yes, other than these.

A. Doing it every year.

Q. Doing it every year?

A. Yes, sir.

Q. At what points?

A. The inspections and corresponding maintenance to which I have just referred which I will give you a few to illustrate what I am referring to, consists of 400 feet on the 10-inch main line—

Q. What main line?

A. The 10-inch main line.

Q. All right.

A. 300 feet on the 8-inch main line, 14,000 feet on the 6-inch main line, 1,000 feet on the Boulder 6-inch branch, 700 feet on the Greeley 6-inch branch, 2,800 feet on the Brighton branch, 600 feet on the Fort Warren branch, 1800

feet on the Cement branch, 1,000 feet on the Johnstown branch.

Q. When were they made?

A. In recent years, a considerable part in 1940.

Q. 1940?

A. Yes, sir.

Q. Subsequent to these in this Exhibit 108?

A. Before, during and after.

Q. Before, during and after?

A. Yes, sir.

Q. And when were there any made previous to that time, to the year 1940?

A. Every year since about 1931.

Q. About 1931?

A. Yes.

Q. Were they utilized in any other regulatory proceedings that this company had?

A. Not that I have knowledge of.

Q. Not that you have knowledge of?

A. No.

The Trial Examiner: Were these just inspections of the line, Mr. Hancock, or—

The Witness: Yes, sir; that is, for operating and maintenance purposes.

The Trial Examiner: For instance, you named there 14,000 feet, I believe, on one particular line. You mean by that that 14,000 feet of that line was inspected?

The Witness: Inspected and reconditioned. Now, there was undoubtedly a great many more inspections than at these points that I have indicated.

The Trial Examiner: But didn't those represent complete uncovering of the line rather than the pit inspection that you mentioned?

The Witness: Oh, yes. The lines which I mentioned represent the places of actual reconditioning of the line, the first step being the examination of the corrosion and the pits and the next step being the reconditioning.

By Mr. Lange:

Q. You say during all that period of time since 1931,

you say the observations have been charted or records made of them as to per cent conditions?

A. The observations have been made from time to time to determine where extraordinary maintenance was required.

Q. Well, did you have anything to do with the determination made in New York as to the rate of depreciation that the company set up on its books?

A. No, sir.

Q. That was testified to by Mr. Davis?

A. No, sir.

Q. You weren't in conference on that at all?

A. No, sir.

Q. Well, why didn't the company make use of those figures when they determined those rates of depreciation?

A. I couldn't say.

Q. What consideration did the company—

A. I might add to my last answer that generally speaking the reconditioning work to which I have referred are not replacements.

Q. They are not?

A. They are reconditioning.

Q. Reconditioning?

A. Yes, sir.

Q. Well, if the company had all that information before it, what use did it make of it?

A. They used the information to determine where and when to recondition the line.

Q. What was that last answer?

A. They used the information to determine where and when to recondition the line.

Q. For that purpose?

A. Yes, sir.

Q. And this study in Exhibit 108, is that intended to serve as some basis to indicate the maintenance—or, rather, what the company's maintenance program is to be or might be?

A. Only as a purely incidental proposition. The main purpose, of course, was to obtain the information for the purposes of this case, and the information so obtained, of course, will be borne in mind by the operating officials of the company.

Q. Well, then, the information that they obtained when-

ever they had to recondition large systems of pipe was purely incidental, too?

A. No, that was the primary purpose at that time.

Q. The primary purpose?

A. Yes, sir. There being no other purpose it would necessarily be the primary purpose.

Q. Well, when those jobs were done, what records did the company maintain on that particular work?

A. As to the cost of it, and location.

Q. Anything else?

A. I think that is all.

Q. Now, referring to your Exhibit 108 again, Sheet 23, you give the coating an 80 per cent condition.

A. That is right.

Q. Although the pipe has a 97 per cent condition and the pipe coating statement: "Bitumastic, plastic on top and bottom, slightly brittle in spots, thin coating, good bond, good coverage, no rust stain, very good condition."

A. Yes, sir.

Q. Why that low per cent condition of pipe coating?

A. I wouldn't regard it as a low per cent. The per cent which I actually gave it was rated down from the higher per cents because of the fact that the coating was slightly brittle in spots and because it was thin, again bringing up the question as to whether or not those two observations applied to original construction conditions or to deterioration which has taken place since construction. Again in this case I am of the opinion that I may have—or, rather, that Mr. Stoddart who made this inspection may have understated the actual per cent condition of the coating.

Q. May have understated it?

A. Yes, sir, but this is the per cent condition reported.

Q. Well, then, what should it have been? What do you make it?

A. Well, that's rather difficult to arrive at without having the coating in front of me.

Q. Well, you didn't have the coating in front of you at the same time—

A. I would do the same thing that Mr. Stoddart has done and I have in all of the inspections which I have reported here depreciated the coating because of observed defects in the coating which I felt might well be attributed

to original construction conditions. In other words, I have taken what I believe to be a very conservative position in regard to the coating percentages. If there was any uncertainty in my mind as to whether it was construction defects or the result of deterioration I would have assumed that it was deterioration, and that may have resulted in an understatement as to the per cent condition of the coating.

Q. Well, then, if you have an understatement of the per cent condition of the coating and this particular information gets into your company's maintenance records, then that would be an indication that the maintenance work is necessary, wouldn't it?

A. No.

Q. Why not?

A. Because nothing would be done in regard to the maintenance of the line until the corrosion on the pipe indicated the necessity of it.

Q. Oh, then where there is a high per cent of pipe condition, the company would apply any character of coating per cent condition—that low coating per cent condition would have no bearing on the company's maintenance program?

A. Absolutely not because it would be a waste of money to move in and begin to replace coating until the coating had depreciated to a point where it was resulting in pipe corrosion.

Q. So, places where, for instance, you have a 99 per cent condition of the pipe, like Sheet 27, "Pipe smooth, pits isolated, heavy tool marks, numerous spots in Sections A-B and C when cleaned out resemble pits but paint in bottom indicates they are old tool marks or mill roughness."

The fact that they are 60 per cent coating there, indicates from this sheet that there isn't any maintenance necessary at this time or until there is much more definite indication of pitting?

A. That is right. The corrosion is almost entirely absent in this particular inspection. It would cause no concern whatever.

Q. And although for another purpose, this Sheet 27 from its location data speaks of the soil being wet, sandy clay with alkali, between gravel road and fence, wheat field

near, alkali shows on surface in field. What kind of a soil condition is that?

A. That is a bad soil condition.

Q. Bad soil condition?

A. Yes, sir.

Q. And that pipe, however, is in 99 per cent condition?

A. That is right. It has evidently had very good protection.

Q. Well, that protection seems to be only 60 per cent good.

A. No.

Q. "Brittle, good bond, good cover, thin, heavy soil strain marks, few rust stains where paint is penetrated by soil or rocks."

A. You use the term where the protection is 60 per cent good, and that isn't the situation.

Q. What is it?

A. The condition is 60 per cent good.

Q. All right, the condition is 60 per cent good.

A. Yes.

Q. Explain the difference.

A. The difference is this, that if the protection was only 60 per cent good it would mean that 40 per cent of the pipe would be exposed to corrosion, but in this case where the protection is—strike that last "protection"—but in this case where the condition is 60 per cent good it means that the pipe is covered by the coating entirely but that the coating itself has depreciated to a 60 per cent condition.

Q. Yes, but you have got marks of penetration, not just depressions.

A. That's right. That is the result of the few rust stains where paint is penetrated by soil or rocks. In other words, there are some slight penetrations of the coating and the corrosion has shot through at those points, a very few points, and that causes a pitting and to a certain extent a decelerated type of pitting.

Q. Why decelerated type of pitting?

A. Because the phenomenon of corrosion in a fairly active state requires that the point at which corrosion takes place be exposed to the soil and also that large surfaces of pipe also be exposed. That is a little bit difficult to make clear in a few simple words, but what I am trying to say is this: That in order for the galvanic action to proceed,

meaning by that the setting up of electric currents from one point on the pipe to another point on the pipe and the lifting out of the metal from the pipe at the point where the electric current leaves the pipe, such galvanic action is greatly retarded if only one small spot of the pipe is exposed but the surface of the pipe under the coating adjacent to the spot not being capable of performing its function of receiving the current from the surface represented by the pitted area.

Q. All right, how do you account for the situation you have on Sheet 35 as compared with what you have just stated? There you have a pipe given 98 per cent condition with coating of 30 per cent and this is the way you describe the coating: "Bitumastic, rust stains, rough, heavy soil marks, pulled away in patches, poor condition."

In other words, I gather from this that sections of the coating were actually pulled away, not only at points but in patches, as you say. Still you have a 98 per cent condition there.

A. That is right.

Q. How do you reconcile that with the other?

A. The coating is in poor condition and the resulting corrosion which has taken place due to the absence of the coating, has taken place almost entirely in one of the 12-inch sections which were inspected; namely, Section A. There was no corrosion in Section B, and only one measurable pit, very shallow in depth, being .005 inches deep in Section C. The corrosion which had taken place in Section A was very mild, the pits were very shallow, and the opinion of the inspector was that the pipe was in 98 per cent condition.

Q. And if Mr. Thackrey had come along he would have given it that same per cent condition, in the light of those facts?

A. I believe that Mr. Thackrey would have given it very close to that per cent condition.

Q. Very close to that?

A. Yes, sir.

Q. Now, on Page 39—Sheet 39, you have pipe coating, "40 per cent condition" described: "Bitumastic, thin, slightly plastic, good coverage, heavy soil and rock marks;

rust stains on surface may be due to foreign material in soil; fair condition."

There is no penetration there and you gave that only 40 per cent condition but you have a pipe that you give 96 per cent condition with pitting in every sector, even as large as medium-sized pits in the C sector. How do you account for that pipe condition?

A. I believe you said in your question that there had been no penetrations but there is nothing in the report to indicate that. The report says: "Heavy soil and rock marks," and it further says: "Rust stains on surface may be due to foreign material in soil."

Q. So you yourself were doubtful as to whether there was any penetration there, weren't you, in making that statement?

A. No, I think there had been penetrations.

Q. Why were you doubtful as to what caused the rust stains on the surface?

A. Because in other locations, which I believed might also be applicable to this location, we observed coloring matter in the soil. There may be some iron content in the soil and it was difficult in some cases to differentiate between the color of the soil due to its natural constituents and the color of the soil due to rust which may have come from the pipe.

Q. Now, the pitting of that pipe was much more extensive in general than the *ptting* of the pipe on Sheet 26, isn't that true?

A. The number of pits on M-39 is not only greater but they are more concentrated than is the case on M-27, and that difference in concentration and number accounts for the difference in the rating given to the pipes in the two instances.

Q. But what accounts for the rating that you have given Sheet 39 on your soil condition—your pipe coating per cent as being only 40 per cent when you haven't any definite indication that in your pipe coating statement that there is any penetration of the coating?

A. I believe in the case of M-39 that there were penetrations.

Q. Even though it is not indicated?

A. That is indicated by the heavy soil and rock marks notation.

Q. But you may have those without having any penetration, don't you, in these other sheets? Don't you always indicate where you had—

A. No, sir, not always.

Q. Well, there was either a break, or where it was brittle or penetration, you had none affirmatively indicated on this Sheet 39.

A. Well, the fact that the soil and rock marks were heavy would indicate that it was either penetrated or so nearly penetrated that the results of penetration had been partially obtained.

Q. Well, why were you doubtful about what caused the rust stains?

A. Because we didn't know.

Q. Well, wouldn't you be equally doubtful as to whether there had been penetration, if you didn't know?

A. No.

Q. Not equally doubtful?

A. No.

Q. Why not?

A. Because we can see the extent of the penetrations and it was merely an observation of the physical facts. The presence of the rust stains on the surface as to whether or not that was due to foreign material in the soil or to the rusting of the pipe would have been a conclusion based on an examination of that material, which we did not undertake.

Q. Well, to what extent did you examine that coating to arrive at the per cent condition you gave it?

A. We examined it as to how thick it was, whether or not it was plastic or brittle; whether or not it covered all parts of the pipe, and whether or not it had been marked by soil or rocks.

Q. Oh, yes, right there I want to ask you: You had to approach the matter of arriving at the per cent condition of the coating in a different fashion mechanically than you did the pipe, didn't you?

A. That is right.

Q. You had a straight section of pipe unconnected—strike out "unconnected"—a straight section of pipe that

had not been disturbed. The pipe itself had not been disturbed; the surface had only been cleaned, isn't that true?

A. That is right.

Q. You didn't have that situation with reference to your coating. You actually had only a very short strip of that, one part of which had been very violently disturbed and broken off, in order to make way for your pipe inspection.

A. Well, we had undisturbed coating to look at.

Q. You mean back from that break?

A. It was planned to handle it in that way so we would have undisturbed coating.

Q. How much of it?

A. To look at. Well, there was not less than one foot on each end of the 3-foot section in the middle, and in many cases there was two feet, and in many cases in order to obtain a better inspection of the evidences of rust in the soil we dug back into the backfill and thereby inspected an even longer section of undisturbed coating.

Q. Well, then, if there had been any actual rock penetrations or soil penetrations in this section of pipe at Sheet 39 you would have had a pretty good opportunity to know it for certain, wouldn't you?

A. No, because we didn't see the protective coating which corresponds to the location of the pits. We saw the coating on the undisturbed section of pipe and we there noted heavy soil and rock marks. If there had been actual penetrations on the sections A, B and C, there would have been no way for us to have discovered that.

Q. All right, on Sheet 56, you there give that coating a 40 per cent condition described: "Biturine, B-i-t-u-r-i-n-e, plastic, good covering and bond, coating thin in spots. Rust stains in small spots outside coating especially in third quadrant on C end. Fair condition."

Why a 40 per cent condition on that coating?

A. The 40 per cent is my judgment as to the condition of the coating as I observed it and is the same as the condition on the previously referred to inspection M-39 where I believe the conditions are very generally comparable.

Q. No, you haven't any heavy soil and rock marks here at all.

A. There might have been.

Q. Didn't you attempt in setting forth your statement

under each of these items on each sheet to follow any rule of uniformity?

A. Yes, we followed the rule of noting the outstanding characteristics of the pipe and coating under inspection. Now, in this case there might have been soil and rock stress marks, or the coating might have been unusually smooth at that point. I am unable to state from the particular language used here.

Q. But that is the inspection that happened to be made by you yourself?

A. That is right. The fact that the coating was thin in spots might be due to the pressure on the top of the pipe, which has a tendency to cause the coating to move down or flow around the sides of the pipe, which I would classify as a result of soil stress conditions.

Q. Yes, but your shallow pits are on the bottom of the pipe, aren't they?

A. In Section A, but not in the other sections.

Q. Not in the other sections?

A. No, sir.

Q. And you have a 98 per cent condition of that pipe in spite of the fact that some of the pittings were large and the others were medium in Section C, weren't they?

A. That is right, but the pits are very scattered and were not in spots as indicated on M-39.

Q. Now, turning to Sheet 69, there is a section of pipe that is in 100 per cent condition.

A. That is right.

Q. That is in a section that has poor drainage, isn't that correct?

A. That is right.

Q. And there you have "Pipe coating—bitumastic—no rust stains—very few lines—no soil stress marks—good covering—good bond. Excellent condition."

From looking at your pipe you found that was in 100 per cent condition but from looking at the pipe coating that could not possibly be in 100 per cent condition, could it?

A. No, it had a few lines on it.

Q. What kind of lines?

A. They might have been root lines or vegetation lines. They usually are.

Q. You didn't make that inspection?
A. No, sir.
Q. You don't know what character those lines were?
A. No, but that is the usual character of lines.
Q. Then on Sheet 80 where you made the inspection and the report shows: "Pipe coating—Barrett hot enamel, plastic—complete coverage—good adherence—no rust stains. Excellent condition," that couldn't possibly be rated 100 per cent?
A. I don't believe it could.
Q. It could not?
A. No, sir.
Q. In your opinion you couldn't ever rate pipe coating 100 per cent?
A. I never have.
Q. But you have rated the per cent condition of the pipe 100 per cent?
A. That is right.
Q. That is possible an the other is impossible?
A. I wouldn't say it impossible.
Q. But you have never done it?
A. I never have done it.
Q. Now, this—strike out "this"—Sheet 7—
A. Pardon me?
Q. On Sheet 71 it couldn't be possible that the per cent condition of 71 per cent there had any relation to the number of this sheet, could it? You didn't make that estimate?
A. No, sir.
Q. That has a pipe condition of 71 per cent?
A. Yes, sir.
Q. There are not very many pittings there, are there?
A. There are, but they are quite deep.
Q. But quite deep?
A. Yes, sir.
Q. All right.
A. And they are overlapping.
Q. What about Sheet 72? You have some there that are quite deep, too, haven't you? There are a great many more there than you have on Sheet No. 72? Why is that 79 per cent?
A. They are not as deep.
Q. Oh, they are not as deep?

A. Yes, sir.

Q. What about the others? Let's take them on Sheet 72. Your first one there is .062. Isn't that deeper than every other one except .080 on Sheet 71?

A. That is correct.

Q. What about the next one, .051? Isn't that deeper than all except the first one on Sheet 71?

A. That is right.

Q. .040 is just a little bit under that .043 on Sheet 71?

A. That is right.

Q. But .051 and .061, and then in the second section, all of those are deeper; the third section, all of those are deeper; still you give that 79 per cent and the other 71 per cent?

A. Partly on account of the pits not being as deep.

Q. You have just turned it around. The pits on Sheet 71 are not as deep as those on Sheet 72 except that one appearing at the top of Sheet 72.

A. The per cent condition on B-31—strike that.

The per cent condition on B-17, Sheet 72, of 79 per cent, is higher than on B-16, Sheet 71, because the pits on the former are not as deep as the pits on the latter.

Q. The pits on Sheet 72 are not as deep as those on Sheet 71?

A. They are not the deepest pits, no, sir.

Q. You mean there is only—strike that.

There is only one pit on Sheet No. 71 that is deeper than those on Sheet 72, isn't that a fact?

A. Yes, but it was overlapping with the adjacent pits and that caused a weakening of the pipe.

Q. That caused a weakening of the pipe?

A. That caused a weakening of the pipe not only due to the fact that it was deeper but also due to the fact it was overlapping.

Q. All right, explain that.

A. If the pits are isolated and not overlapping they do not have as much effect on the strength of the pipe as if they are overlapping.

Q. All right, but look at the number of pits that you have on Sheet 72 and the extreme depth of those in com-

parison to all of your other pits on Sheet 71. What about that with reference to the condition of the pipe?

A. The number of pits would not contribute directly to the rating of the pipe; for example, in—

Q. Taking not just the number but the depth also.

A. That is what we did, which I have already explained.

Q. And as many pits as you have here, not just the number but just the depth of them, in comparison with Sheet 72, would still prompt a giving of 72 a 78 per cent condition as compared with 71 giving a 71 per cent condition?

A. Absolutely.

Q. The sheet before that, Sheet 70, in there I see you have given that a 78 per cent condition.

A. That is right.

Q. How did you arrive at that?

A. There were only two pits. One of them is extremely deep.

Q. All right.

A. The loss of strength was judged on the basis indicated by this report. The pits indicated on this section have since been restored by spot welding as indicated by the report—as indicated by the report as being possible. I have hydraulically tested pipe which is almost identical with this particular inspection and found that the loss of strength of the pipe wall due to a pit of that character is not serious. I think in this case I have understated the per cent condition.

Q. Of the pipe?

A. Of the pipe on B-15, Sheet 70.

The Trial Examiner: We will stand in recess until 2:00 o'clock this afternoon.

(Whereupon, at 12:30 o'clock, p. m., a recess was taken until 2:00 o'clock p. m., of the same day.)

Afternoon Session, 2:00 P. M.

The Trial Examiner: The hearing will be in order.

Whereupon, HARRY D. HANCOCK, the witness on the stand at the time of recess, having been previously duly sworn, resumed the stand and testified further as follows:

Cross Examination (Continued)

By Mr. Lange:

Q. Mr. Hancock, referring to Sheets 77 to 83, mentioned this morning with reference to covering sections that included secondhand pipe—

A. That is right.

Q. You say that was indicated to you because there was paint in the bottom of the pits?

A. On portions of the line; on other portions of the line it was apparent that the pipe was new.

Q. What do you mean by new? It had just been installed before, hadn't it?

A. Not necessarily, no.

Q. What do you classify as secondhand pipe?

A. Pipe which has been used in one location and is later used at another location.

Q. I see.

A. On this particular line it was composed of both new and secondhand pipe.

Q. Both new and secondhand pipe?

A. Yes, sir.

Q. Well, now, this Sheet 81, did any of those paint marks appear to indicate it had been used before, that particular section of pipe?

A. Of course, I can't state an affirmative answer that it was not used before, but I would judge it had not been used before. I have regard to the pipe reported on B-26, Sheet 81.

Q. What about Sheet 80 under "Corrosion"? You have stated here: "Pipe covered with tool marks which looks like cleaning machine marks evidently made before painting."

A. I would judge that in that instance the pipe had been used before; otherwise, the cleaning machine marks would not have been there.

Q. You gave that a 97 per cent condition?

A. Yes, sir.

Q. And on Sheet 81 you gave it 100 per cent condition?

A. Right.

Q. If the pipe covered by inspection Sheet 81 were a secondhand pipe—you gave it 100 per cent condition?

A. Yes, sir.

Q. Would you classify that as having the same value as new pipe in 100 per cent condition?

A. Yes, sir.

Q. You would?

A. Yes, sir, it was as good as new.

Q. Although it might have been reconditioned and you don't know how long it had been in the ground before?

A. No, I couldn't say affirmatively how long it had been in the ground, but what I say was that it was identical with new pipe. It had the roll marks on it and with the exception of the pick marks near one end of the pipe, made while digging an inspection hole, the pipe was perfect.

Q. You have the working papers there on the compressor stations, Mr. Hancock?

A. Yes, sir.

The Trial Examiner: Mr. Hancock, you made some mention of a pick hole in the pipe as the result of digging a pit for inspection, didn't you?

The Witness: Yes, sir.

The Trial Examiner: I am not an engineer and this, perhaps, is rather an academic question, but would you briefly advise me as to the manner in which these pit holes are dug? What precautions are taken not to disturb the pipe as you dig down into the pit?

The Witness: The inspection holes were dug by a contractor, as Mr. Davis testified to last Friday. The contractor and workmen were warned to exercise all possible care in excavating not to strike the pipe, but we saw that in a few cases inadvertently a tool did strike the pipe and it is very apparent when there is a fresh tool mark that it is a fresh tool mark, so they are easily identified as distinct from corrosion.

The Trial Examiner: Do these workmen remove all of the dirt from around the pipe or do you do that when you make the inspection?

The Witness: They remove all of the dirt from around

the pipe and underneath the pipe so the inspector can get underneath to look at it.

The Trial Examiner: Can they do that without disturbing this enamel coating on the pipe?

The Witness: No, the instructions were to remove the enamel coating from the 3-foot section in the center of the inspection hole, but not to disturb the enamel coating in the balance of the hole.

The Trial Examiner: I see. That is, where you made your inspection as to the condition of the coating?

The Witness: Yes, sir. The removal of the enamel is a very hard job. It takes quite a lot of time to get it off. It is hard and has to be chipped off and it takes a couple of workmen an hour or two to get it off, even in the 3-foot section. The final operation is with paint remover to remove the last of it, the primer coat which is underneath the enamel.

The Trial Examiner: I see.

By Mr. Lange:

Q. Referring to Sheets 80 and 81, do you know what the company paid for the pipe that was installed in those sections?

A. No, sir.

Q. Can you ascertain that information for us?

Mr. McCreery: What is it that you want?

Mr. Lange: The pipe that these two sheets 80 and 81 cover.

Mr. McCreery: The particular joint or section?

Mr. Lange: Those two sheets, 80 and 81.

Mr. McCreery: That is the information desired.

Mr. Lange: That is right.

Mr. McCreery: If it is available we will get it; if not, we won't. However, we will be glad to give it to you if we have it.

Mr. Lange: All right.

Q. Mr. Hancock, referring to your working papers on the Wellington compressor station, now, please? In your Exhibit No. 107 you have Buildings and Foundations, 90 per cent condition?

A. Yes, sir.

Q. Buildings and Foundations, how did you arrive—strike that.

Exactly how did you go about determining that per cent condition?

A. By a general inspection of such parts of the foundations as were exposed—we did not excavate around the foundations—and the determination of any cracks or checks in the concrete, and an examination of the steel work in the frame of the building and the steel sheets which covered the building, and an examination of the paint, and an approximation of the extent of depreciation overall in that entire account.

Q. Well, those buildings and foundations, and so forth that you have, consist of different classes of property, don't they?

A. That is right.

Q. In other words, the building parts consist of what kind of material that enters into its construction?

A. The main buildings consist of steel framework, Truscon type of construction which is covered on the outside by steel plates painted with aluminum paint.

Q. And that structure is built on a concrete foundation?

A. That is right.

Q. And how did you go about determining the per cent of condition of that concrete foundation?

A. By an inspection of that portion which we could see. As I previously stated, we did not excavate to determine if there was any deterioration of the foundation under the surface of the ground.

Q. How much of it was exposed, of the concrete foundation?

A. I expect about two feet above the ground.

Q. And that was what percentage of the total, approximately?

A. I couldn't say.

Q. You don't know how much of it there is under ground?

A. No.

Q. Did you give the whole building a per cent condition without attempting to determine the per cent condition of the metal part before you determined the condition of the concrete?

A. I treated the account as a whole.

Q. And by just observing the condition of the building and of the foundation, you gave the entire structure a one—rather, a single per cent condition?

A. As a whole, yes, sir.

Q. As a whole?

A. Yes, sir.

Q. Well, would that metal and other material that goes into the structure above the concrete depreciate as rapidly or as slowly as the concrete itself?

A. Probably more rapidly.

Q. Probably more rapidly?

A. Yes, sir. However, the aluminum paint coating was in good condition. It might require some touching up in spots and have slight rust stains, but no pitting or corrosion on the metal sheets.

Q. And you just arrived at an overall per cent, just considering the concrete and structure built on it as one unit?

A. That is right.

In that particular case there was some question in my mind as to what portion of certain defects in the concrete foundations were due to deterioration and what proportion was due to construction conditions; for example, on the southeast corner of the main building, if I have my directions straight, there is a patch of roughness on the concrete foundation which indicates to me that it might have happened due to freezing during construction. In other words, about half an inch of concrete was spalled, which would have happened had the concrete had a slight touch of frost during construction. I don't believe it could have happened after the concrete cured.

Q. What time of the year was that concrete cured?

A. I don't know that it was or that it was a freezing condition. I state that it indicates the type of defect that

might have resulted from freezing. It might have been some other reason—

Q. I see.

A. I don't wish to be understood as saying it did freeze or that it was built during freezing weather.

Q. What further investigation did you make with reference to ascertaining any further facts on that point?

A. I didn't make any investigation on that point?

Q. Before I overlook it, I will ask you this: Going back to Exhibit No. 108, if these lines, main and lateral, as set forth in these sheets, were adequately maintained, how long would those lines continue to function for the transportation of natural gas?

A. Subject to adequate maintenance and necessary replacement, they would continue indefinitely.

Q. Now, going back to this Wellington station again, you have "Company Cottage—weather board—asbestos—shingle—concrete foundation—well painted—condition good, with an 85 per cent condition." How do you arrive at that?

A. By an inspection of the cottage, observing the foundation and the siding and the shingles and porches and general construction of the cottage and its general condition.

Q. How long has that cottage been there?

A. As far as I know, it was built when the station was built.

Q. That was what year?

A. I think it is on the work sheet that you have there.

Q. On this work sheet?

A. Yes. It was first operated in 1926.

Q. Now, this steel building that you first gave the description of and per cent of condition, was that built at the same time?

A. Yes, sir.

Q. And it is your opinion that this wooden—strike "wooden"—that this company cottage of wood construction as detailed in your work sheets has a present condition of 85 per cent, and the other building of 90 per cent, the steel building?

A. No, sir.

Q. What is the correct fact?

A. The buildings as a whole have 90 per cent.

Q. The buildings as a whole?

A. Yes, sir. The cottage to which I refer is a very small percentage of the building investment.

Q. Do you mean the cottage is a small unit of the items that go into Wellington compressor station?

A. It is a small percentage of the items that go into buildings and foundations at Wellington station, and it is still a smaller per cent of the items that go into the Wellington station as a whole.

Q. Oh, yes, you have "Oil Tanks—slight corrosion—fair 95 per cent condition"?

A. Yes, sir.

Q. Do you know how long they have been in service?

A. No, but I think they were installed when the station was built.

Q. When the station was built?

A. Yes, sir.

Q. Now, as I understand it, these inspections at the Wellington and Arvada stations were made by you personally?

A. That is right.

Q. Or did you have someone else do it like you did with the pipe line inspection?

A. I made the inspection personally.

Q. And you determined the per cent condition yourself?

A. Yes, sir.

Q. And from your testimony this morning, those inspections of the two stations were made on the one day, November 19, 1940?

A. That is right.

Q. How far are those two stations apart in distance, approximately?

A. I wouldn't care to approximate it, but I will measure it if you want me to.

Q. Yes, please do.

A. It will take about five minutes.

Q. You can make a note of that and in the meantime we will go into something else.

On page 8 of your Exhibit No. 107 you state: "The arithmetical average per cent condition of the pipe and coatings at the 83 places of inspection were 93.43 per cent

and 61.08 per cent, respectively." That is 93.43 per cent? Is that the—

Mr. McCreery: You intended to refer the witness to Page 9 instead of Page 8, Mr. Lange.

Mr. Lange: I beg your pardon?

Mr. McCreery: You said Page 8. You meant Page 9.

Mr. Lange: I beg your pardon. I have reference to Page 9.

Q. Does 93.43 per cent represent the average per cent condition of the pipe?

A. It does.

Q. And 61.08 per cent represents the average per cent condition of the coating?

A. It does.

Q. Now, then, you state: "The observed weighted per cent condition of the pipe lines, including pipe and coatings, based on investment data furnished to me, was 92.46 per cent."

What investment do you have reference to?

A. The plant and the investment data corresponding to each pipe line.

Q. You mean the items that are reflected on the company's books and records as to cost?

A. Yes, sir.

Q. As to the original cost of these properties?

A. I couldn't say whether it is original cost or not.

Q. And what particular information in connection with that was furnished to you that you used to base your proceeding under this section—

A. All of the investment data that was so furnished.

Q. Now, then, was that taken by you from the company's books and records or was it in a compiled form, or in what form did you get access to it?

A. It was in compiled form and furnished to me, and I did not take it from the books and records.

Q. Who furnished it to you?

A. Mr. Willard.

Q. Mr. Willard?

A. Yes.

Q. What is his position?

A. He is engaged in work of that character having to do with the investment data pertaining to this case.

Q. To this rate proceeding?

A. Yes, sir.

Q. With what organization is he connected?

A. I understand he is employed by Electric Advisers, Inc.

Q. Well, you would know, wouldn't you, Mr. Hancock, what connection he has with them or if he is actually in fact employed by them?

A. Yes, that is my understanding.

Q. And he supplied you with that information?

A. Yes, sir.

Q. In connection with the inspection you made of all of these items of property, did you make any determination at that time or take into consideration the fact whether any portion of it or any item of it was in use or not in use?

A. No, sir.

Mr. McCreery: Are you referring to the lines? To what do you refer?

Mr. Lange: I will limit it to the compressor station, compressor station equipment, and other property connected with the compressor station.

The Witness: No, sir, I did not. I mean by that that element did not enter into my conclusions.

By Mr. Lange:

Q. Well, was it known to you or not?

A. Yes, sir.

Q. Which items, if any, in the items of equipment at either one of the stations were not in use?

Mr. McCreery: Just a moment. Do you mean on that day or currently in use?

Mr. Lange: Currently.

The Witness: It was my finding that all of the equipment in those two compressor stations which I inspected was in use currently with the possible exception of a spare

unit which is used and held in reserve for emergencies or in case an accident might occur on peak days. I classify such an emergency unit as being used and useful.

By Mr. Lange:

Q. And which station was that?

A. Both.

Q. Both?

A. Both Arvada and Wellington.

Q. You are pretty well informed as to the record of operation of those two stations, aren't you?

A. Yes, sir.

Q. How frequently have either or both of those units been operating during the past twelve months?

A. I am speaking from memory now and I may not be exactly right. At the Wellington station the per cent of operation during the past twelve months is something like 17 per cent—that may be just the order of the percentage—and at the Arvada station, somewhere in the range of 23 or 25 per cent.

The Trial Examiner: That is of this unit, Mr. Hancock, you describe as having in reserve?

The Witness: No, sir. I am speaking there of the percentage by the actual compressor hours operated of all of the units to the total potential compressor hours they could operate if all were operated all of the time. That includes the emergency unit, because the emergency unit is not held aside as a unit because they are all operated at one time or another, but not necessarily all of them at any one time.

By Mr. Lange:

Q. I don't believe I asked you Friday, when you gave your qualifications and experience, as to the cases in which you have testified. If you don't know them offhand, can you make a list of those proceedings?

A. I think I can answer that and you can see if the answer is satisfactory and complete enough.

Q. All right.

A. Beginning in 1920, I appeared in numerous proceedings before the Court of Industrial Relations of the

State of Kansas, later the Public Utilities Commission, in regard to rate matters affecting the Kansas Natural Gas Company and also in connection with the same proceedings before the Federal Court, Judge Booth presiding, at Minneapolis.

During the following few years I also appeared before the Public Utilities Commission of Kansas in various rate cases involving the pipe lines and distributing companies in that state.

Q. That is, the State of Kansas?

A. Yes, sir.

Q. Are those the Cities Service cases that they had in Kansas?

A. That is right, but to go back a little bit on my next to the last previous statement, I wish to state this: In the appearance before Judge Booth I was the Commission's witness.

Q. What was the subject matter of the testimony?

A. It related to leakage and loss and unaccounted for gas.

In the following few years I appeared in various rate case proceedings before the Corporation Commission of Oklahoma, and on one occasion I was employed by the Corporation Commission to make an investigation and testify before the Commission as to the results found.

The Trial Examiner: Do you recall the name of that case, Mr. Hancock?

The Witness: I can't give you the exact name, but it involved the Oklahoma Natural Gas Company and the particular subject of the investigation was the town border measurement problems and leakage problems at Muskogee and Wagoner, Oklahoma.

The Trial Examiner: It wasn't a rate case?

The Witness: It was a branch of a rate case but not the rate case proper. It was one phase of a rate case.

The Trial Examiner: I see.

The Witness: In 1931 I appeared before the Public Utilities Commission of Kansas in the Cities—strike the

last—before the Public Utilities Commission of Kansas in the general rate case involving the city gas rate in Kansas, and again—not in the same proceedings—in a similar proceeding which was held in 1934.

By Mr. Lange:

Q. Did you testify in the Wichita case?

A. I don't know whether I could identify it as the Wichita case.

Q. The one that subsequently went to the Supreme Court of the United States?

A. I think I testified in all those cases, but whether it is the one you have in mind or not, I am not able to say.

A few years later I testified before the Interstate Commerce Commission in the Empire Pipeline Company case which was a valuation case.

Q. Were those all of the cases that you can recall?

A. They are all I can recall at the present time.

Q. Which of these named proceedings did you give testimony similar to the character that you have given in this proceeding, or have prepared exhibits comparable to these?

A. The two particular proceedings which come to my mind are the 1931 and 1934 cases involving the gas rates in Kansas before the Public Utilities Commission and the proceeding before the Interstate Commerce Commission in the Empire Pipeline Company case.

I might add that I have prepared certain information, but have not yet testified to it, in cases involving the Kansas City Gas Company before the Public Utilities Commission of Missouri and the Arkansas-Louisiana Gas Company before the Public Utilities Commission of Arkansas.

Q. In these proceedings where you prepared testimony or gave testimony on behalf of the regulatory bodies, did that include testimony of a nature as you have given here today in this proceeding?

A. No, sir, it did not.

When I refer to the leakage testimony made on behalf of the Kansas Commission, I mean testimony regarding

the economic study of leakage reduction distinct from any attempt to put per cent conditions on property.

Q. Now, in connection with your data that you had for the preparation of these two exhibits and the testimony that you gave, what information did you have available as to the reserves of gas that are in turn available to the company from whom Colorado-Wyoming Gas Company purchases its gas?

A. None.

Q. None?

A. None.

Q. You had no such information available?

A. No, sir.

Q. You gave it no consideration?

A. No, sir.

(Vol. 25, pp. 3454-3510.)

J. L. WILLARD, a witness for Colorado-Wyoming Company, testified as to present per cent condition of certain classes of property of the Company (Ex. 111, Statement 2; Vol. 26, pp. 3567-3586.)

The witness resides in New York, is associated with F. C. Hamilton (a witness on Going Concern Value in this case), who is Consulting Engineer for Electric Advisers, Inc. Witness graduated in civil engineering at the University of Colorado in 1922. His association with the natural gas production, transmission and distribution companies of the Cities Service group began in that year and has continued to the present time. From 1925 until 1935 he was an engineer in the Rate and Valuation Department of Henry L. Doherty & Co.; from 1935 to 1937 he was an employee of Cities Service Company in the same capacity; and since January 1, 1938, has been employed in the same capacity by Electric Advisers, Inc.

Since 1925 he had full or joint supervision over valuation work in many states on behalf of numerous companies in the Cities Service group. Such work related both to electric companies and to other companies engaged in the joint distribution of gas and electricity. More recently he had

charge of two complete valuations of the Natural Gas Pipeline Company of America, together with its associate, Texoma Natural Gas Company, the result of which work was presented before the Federal Power Commission in August, 1939. The total value of the properties with respect to which the witness has made valuations is approximately 800 million dollars.

Has had general supervision over valuations being compiled in various parts of the country, and in addition has been and is engaged directly and in a supervisory capacity on Original Cost studies, in compliance with 2 D of the Uniform System of Accounts prescribed by the Federal Power Commission.

The witness testified that:

> "This work requires complete analysis of all construction job costs and allocation of all such costs to particular units or items installed. It also involves the investigation of maintenance work with the view of determining whether or not some of the charges were properly capitalizable."

Witness testified before the Federal Power Commission Examiner in the Natural Gas Pipeline Company case in 1939; in the Federal District Court in Colorado in connection with the condemnation of electric property in the City of Fort Collins in 1934; and has actively participated, without testifying, in several rate cases before the Kansas, Missouri, Ohio and Michigan Public Service Commissions and the Interstate Commerce Commission.

(Vol. 25, pp. 3527-3532.)

His study and determination of present per cent condition included the following classes of property:

The newly constructed compressor building and warehouse at Arapahoe Station, which at the time of testimony by the witness was being completed and prepared for service. (Account 1004) (Cost $1,332.62), 100 per cent condition (Vol. 26, p. 3567).

All the office equipment, including furniture, calculating machines and typewriters (Account 1008) (Cost $3,415.25) to which he gave an 85 per cent condition (Vol. 26, pp. 3568-3569).

Automobiles and trucks. (Account 1009) (Cost $5,053.34), to which he gave an over-all 58 per cent condition (Vol. 26, pp. 3575-3576).

Miscellaneous tools (Account 1011) (Cost $1,295.55), to which he gave a 50 per cent condition (Vol. 26, p. 3579).

Telephone lines (Account 1018) (Cost $498.74), to which he gave a 95 per cent condition (Vol. 26, pp. 3583-3584).

Organization expense (Account 1019) (Cost $3,472.28) was not depreciated (Vol. 26, p. 3586).

The witness arrived at the stated per cent condition of the foregoing classes of personal property in the following manner:

He made careful personal observation and examination of the various items in each of the several classes of property inspected and reported on by him, as to per cent condition or depreciation thereof. Has had considerable experience over a period of years in the determination of present utility value of such property in his work as a valuation engineer.

To Office Furniture, desks, tables, chairs, and steel cabinets and shelving, based on usage and experience, he applied a factor of 92 per cent condition; to calculating machines and typewriters based on the same factors plus the maintenance cost of restoring moving parts as they deteriorate, he found them to be in 70 per cent—the over-all per cent conditions being 84.97, and so 85 was adopted. He did not consider the age of any item as a factor in his determinations, as age is not the measure of the extent or character of use to which it has been subjected, which did have a bearing in his study and determination. With respect to the calculating machines and typewriters he sought and obtained information as to the character and extent of use that had been made of them.

Automobiles and trucks were given a present per cent condition, based on the following factors: actual annual depreciation, original cost, salvage or turn-in value, years in service and usage.

Tools consist mainly of small portable tools, welding, and pipe threading equipment, etc. In many of the items de-

terioration in the main is for parts which are replaceable at a small cost. Most tools were pretty well used.

The Telephone Line, from Wellington Compressor Station to the Town of Wellington consists in the main of No. 12 wire, glass insulators, receiving sets and incidental items. The poles upon which the line is strung do not belong to the company. The wire and insulators deteriorate very little. He made careful observation, in the light of his many years of experience in the valuation of electric power lines and equipment. The line is in good condition. Date of installation was not a factor in his determination of per cent condition.

The per cent condition of all other items and classes of depreciable property of the Company was determined by Mr. Hancock.

(Vol. 26, pp. 3567-3586.)

On cross-examination, with respect to Exhibit 111, he testified that he did not take into consideration anything at all that the Company had set up on its books for depreciation. His study embodied in Exhibit 111 is based strictly on Observed Depreciation.

"Q. What character of depreciation has been set up by the company on its books?

"A. I think I heard Mr. Davis say that was just an arbitrary allocation set up on the books of the company.

"Q. You heard Mr. Davis' testimony with reference to the fact that the figures were submitted to him by the New York office?

"A. Yes, I heard him say that.

"Q. Well, as a man treating accounting matters in the preparation of this kind of an exhibit, what attention did you give to those figures that appeared on the company's books?

"A. None at all.

"Q. None at all?

"A. No.

"Q. You made no investigation as to whether they were excessive or not?

"A. I wouldn't even know how to go about measuring whether they are excessive or not.

* * * * *

"*The Witness:* • • • this exhibit was built up on the basis of recorded book costs of the property less observed depreciation, and no reference was made in any way to any amount set up on the books of the company as an arbitrary allocation to a reserve accrual."

(Vol. 26, pp. 3621-3624, 3626.)

• • • • •

Q. Now, in connection with the preparation of that Statement No. 1, you applied, as you stated, the per cent condition figures as computed by Mr. Hancock in his Exhibit No. 108?

A. That is correct.

Q. And you presented the dollar figures in accordance with those percentages?

A. That is correct.

Q. Rather, those percentages were computed in September 1939 and you are applying them as to September 30, 1940. What are you doing about that one year in between?

A. I think ordinary maintenance and repair of the line during that period would probably keep them in the same condition.

Q. Oh. Then there is no depreciation that you take care of at all for that year?

A. I applied the factors that Mr. Hancock gave me as to the value of September 30, 1940.

Q. Yes, but these computations and percentages were arrived at by him, according to this exhibit, and according to his testimony, as of September 30, 1939, and reflect conditions as of that time?

A. Yes, sir.

Q. Well, you make no provision for any depreciation for the ensuing period of one year?

A. I had nothing to do with the depreciation of those accounts handled by Mr. Hancock.

Q. Yes, but you set up your statement as of September 30, 1940, giving what you determined the depreciated properties and plant and investment less depreciation, didn't you?

A. That is correct.

Q. And there is one year in between there that you haven't taken account of, isn't there?

A. Yes, sir.

Q. And how do you justify that?

A. I don't want to speak for Mr. Hancock, but I believe his testimony said that depreciation wasn't a matter of time or years; that he indicated that pitted condition on the pipe was decelerating; that in my opinion the maintenance and care given the lines in the interval during the time that he made the study and the date of these figures would indicate that there is no change in those conditions.

Q. You stated that during that year you assumed that there was proper maintenance kept up on these properties?

A. There is proper maintenance kept up all the time.

Q. You would be just capitalizing that; you wouldn't need any other depreciation?

A. I don't understand your question.

Q. You didn't give any account to any depreciation accruing during that year, but you said you assumed that proper maintenance would be kept up?

A. Correct.

Q. You would just be capitalizing that maintenance; you wouldn't acquire any additional depreciation?

A. I don't think that maintenance is capitalized.

Q. If you would proceed in that fashion you wouldn't capitalize maintenance?

A. No, it is a maintenance charge.

Q. It is a maintenance charge?

A. Yes. Spot welding and—

Q. During that period, as you stated, there was no depreciation that you took into account or that existed during the twelve months period?

A. I used Mr. Hancock's figures.

Mr. McCreery: I don't believe this witness conceded there wasn't any. He said he didn't make any alteration of the figures.

Mr. Lange: I think the record shows what the witness said.

Mr. McCreery: That is what I say.

The Trial Examiner: The fact is, Mr. Willard, your computation dated September 30, 1940, nevertheless, is based on depreciation observed in September of 1939, isn't that correct?

The Witness: Correct.

Mr. McCreery: That is, with respect to the items covered by Mr. Hancock?

The Witness: On pipe lines only.

Mr. McCreery: Mr. Hancock's compressor station examinations were made in 1940; his 1939 study included only the main line.

The Trial Examiner: That is what I recall, the main and the laterals.

Mr. Lange: The main line and all laterals set forth on Exhibit No. 108.

Mr. McCreery: That is right.

By Mr. Lange:

Q. Referring back again to Statement 1, Exhibit 111, did you take into consideration anything at all that the company had set up on its books for depreciation?

A. No, sir.

Q. You did not?

A. No, sir.

Q. Or what the company had currently set up on its books for depreciation?

A. No, sir. This was based strictly upon observed depreciation.

Q. And the company's records on that didn't serve as a guide at all?

A. No, sir.

Q. Why didn't you give it any consideration at all?

A. Because the entire depreciation in this exhibit is based on observed depreciation.

Q. What character of depreciation has been set up by the company on its books?

A. I think I heard Mr. Davis say that was just an arbitrary allocation set up on the books of the company.

Q. You heard Mr. Davis' testimony with reference to the fact that the figures were submitted to him by the New York office?

A. Yes, I heard him say that.

Q. Well, as a man treating accounting matters in the preparation of this kind of an exhibit, what attention did

you give to those figures that appeared on the company's books?

A. None at all.

Q. None at all?

A. No.

Q. You made no investigation as to whether they were excessive or not?

A. I wouldn't even know how to go about measuring whether they are excessive or not.

Q. Why do you suppose the company set them up on its books?

Mr. McCreery: I object to that as wholly immaterial and irrelevant and that it is not proper cross examination.

Mr. Lange: Mr. Examiner, he has testified with reference to the construction of this exhibit from the company's books and records; he states he is thoroughly familiar with accounting problems with the history of this company and—

The Trial Examiner: I know, Mr. Lange, but he has not considered depreciation set up on the books of the company.

Mr. Lange: He said he did not give it consideration in the preparation of this exhibit, but I want to know what consideration he gave it from the fact that it did appear on the company's books—

The Trial Examiner: I understood he gave it no consideration.

Mr. Lange: —in the preparation of this exhibit.

Mr. McCreery: He said that he gave no consideration whatsoever to it.

Mr. Lange: I will ask him as an accountant what his opinion was with reference to that item that he found on the company's books when he prepared this exhibit.

Mr. McCreery: I object to that as not proper cross examination and it bears no relation to any issues herein involved.

Mr. Lange: This witness went to the company's books and determined the character of the exhibit he was going to prepare. In taking those figures he had to determine what he was going to consider and what he wasn't going

to consider. He is constructing an exhibit comprised of engineering and accounting matters and I want to know as an accountant what his opinion was with reference to the treatment of them.

The Trial Examiner: Mr. Lange, the witness says he gave them no consideration. He stated that he knew they were on the books of the company but gave them no consideration whatsoever.

Mr. Lange: I want to know why he didn't as an accountant in an accounting manner.

The Trial Examiner: All right.

The Witness: As you previously stated, this exhibit was built up on the basis of recorded book costs of the property less observed depreciation, and no reference was made in any way to any amount set up on the books of the company as an arbitrary allocation to a reserve accrual.

By Mr. Lange:

Q. In connection with your engagement on this work, were there any particular limitations within which you had to work?

A. I was requested to make this exhibit.

Q. You were requested to make it in what fashion?

A. In the fashion that it is made.

Q. And you were instructed to make it in that fashion?

A. I would say I was under instructions to make it in that fashion.

Q. Under what character of instructions?

A. There were no instructions at all in the manner that I was to make it except that it was to reflect observed depreciation.

Q. And what else was to be reflected from those instructions that you got?

A. I received no instructions. I made it up with my own accord—other than to reflect observed depreciation as compiled by Mr. Hancock and also compiled by myself.

Q. In connection with this engagement, who gave you your instructions with reference to the matters that you were to prepare for presentation in this record?

A. I was advised by Mr. Hamilton to come out here and prepare the necessary data for this hearing.

Q. To prepare the necessary data for this hearing?

A. Yes.

Q. Who was to determine what would be the necessary data?

A. I guess in this instance I was the one that determined it.

Q. You were the one that determined it?

A. Yes.

Q. And you determined the manner in setting up the items on this Statement 1?

A. Oh, yes.

Q. And you determined the manner in which the property was to be depreciated?

A. I determined the manner in which the amount of depreciation would be reflected on these sheets. I didn't determine the manner in which the pipe lines and compressor stations would be depreciated, no, sir.

Q. You mean that you took the figures from those as prepared by Mr. Hancock and related those percentages to dollars?

A. That is correct.

Q. But what were your instructions with reference to those items with which the figures of Mr. Hancock did not apply?

A. The entire exhibit was based and depreciated on the basis of an *observe* depreciation, and since Mr. Hancock did not compute the existing observed depreciation on certain accounts, I calculated that myself.

Q. Then your instructions were to *used* observed depreciation in the preparation of the exhibit?

A. Yes, sir.

Q. From whom did you get those instructions?

A. Mr. Hamilton.

Q. Mr. Hamilton?

A. Yes.

Q. What are his initials?

A. F. C. Hamilton.

Q. F. C. Hamilton?

A. Yes.

(Vol. 26, pp. 3617-3626.)

H. P. Davis, Secretary of the Company from its organization to date, testified with respect to the balance sheet item of September 30, 1940, entitled "Reserve for Depreciation of Gas Plant" $504,482.22 as follows:

The amount stated is the remainder in that account at that date after certain charges and credits from time to time. The Company never set up any specific rate of annual depreciation charges in that account. The amounts set up "are more or less arbitrary amounts set up from year to year based upon what we felt was needed at that time." He continued "at various times they used different approaches and different percentages. At one I believe we used four per cent straight line depreciation" (Vol. 24, pp. 3308-3309). Apparently in the early years the Company attempted to accrue an amount equivalent to what the Federal Income Tax Bureau would permit as a deduction (Vol. 24, p. 3310). The determination was made in New York; the witness did not participate therein; the amounts so determined were entered on the books of the Company as furnished from year to year by the New York office accounting department; and witness made no investigation or independent computation of his own as to the basis used or whether it reflected the proper annual depreciation rate and amount (Vol. 24, pp. 3311-3315, 3318). "The whole purpose of the account was to endeavor to set up sufficient money to provide for replacements, extraordinary items as they might come up" (Vol. 24, p. 3316). "Our experience has shown us that by then (1937) our replacements had not materialized as rapidly as we thought perhaps they would" (Vol. 24, p. 3320). The annual accrual was reduced in that year (Vol. 24, p. 3321). There has been no determination recently of accrual (Vol. 24, pp. 3322-3325).

Composite Service Lives (Commission Ex. 200).

Fulton W. Copp, a witness on behalf of the Commission, testified: He is an engineer by profession, employed in that capacity by the Division of Gas Engineering of the Federal Power Commission at the Regional office of the Commission in Denver, and has been so employed since April 17, 1939.

. . . . . .

A. "In June 1925 I was graduated from the University of Illinois with the degree of Bachelor of Science in railway electrical engineering after having spent an additional year at the University taking courses in economics and finance.

"From 1925 to 1928 I was employed as assistant to the Plant Superintendent of a subsidiary of the Borden Company in Detroit, Michigan. My work with this company included the operation, testing and maintenance of electrical equipment, Diesel and steam engines, boilers and other equipment used in the fluid milk industry; analyses of operating costs and property inventories. Prior to my permanent employment with this company, I had worked several summers in their accounting division.

"In 1928 I was employed by the Ohio-Kentucky Gas Company, which at that time was engaged in the production of natural gas, principally in eastern Kentucky. My work with this company included leasing of gas lands, purchasing of rights of way. Subsequently, I was made assistant to the Chief Engineer and later had charge of all of the company's activities in eastern Kentucky, which included drilling, the construction of gathering systems, building of measuring stations, and the construction of a field booster station.

"In 1929 I was transferred to Texas, where I had charge of all of the activities of the Texas Fuel Gas Company which was engaged in the production, transmission and distribution of natural gas for domestic and commercial purposes. Subsequently, this company became the Texas Gas Utilities Company and its activities were expanded considerably. I made the initial surveys and assisted in the design of the company's new transmission lines and distributing systems in southwest Texas. I also made market survey for both domestic and industrial gas in areas not served by the company.

"Late in 1930 I was transferred to New York where I made engineering studies and compiled data in connection with the financing of natural gas companies. During this period, I made inspections of properties and studied the operations of natural gas companies in West Virginia, Ohio, Tennessee, Louisiana and Oklahoma and visited many of their principal industrial consumers. Later I made an ex-

tensive market survey for industrial gas in northern Ohio. I also spent considerable time in Minneapolis assisting in preliminary engineering work on a proposed gas pipe line to serve that city. Late in 1931 I made a market survey for industrial gas in central New York state.

"From 1932 to 1937 I was in charge of operations of a drift placer mine in California as well as being an officer of the company operating the mine.

"In 1937 I was employed as operating manager of the East Penn Gas Company at Lancaster, Pennsylvania. In addition to having charge of the operations, I did considerable work in the development of distribution of liquefied petroleum gas to large consumers.

"In 1938 I was employed as engineer by the Memphis Natural Gas Company where I did special work in connection with cathodic protection of pipe lines of the company. I also had charge of the preparation of a detailed physical inventory and an original costs analysis of all of their properties.

"Since April 1939 I have been employed by the Division of Gas Engineering of the Federal Power Commission as an Associate Engineer. My entire time with the Commission has been devoted to the present investigation of Canadian River Gas Company, Colorado Interstate Gas Company, and Colorado-Wyoming Gas Company."

Q. Mr. Copp, in connection with your assignment of work having to do with Colorado-Wyoming Gas Company, what portion of your time did you devote to that after being employed by the Commission?

A. Commencing on September 18, 1939 I devoted practically all of my time until May 1940 and perhaps a month in the latter part of 1940.

Q. Now, then, during that period of time, did you have occasion to actually make—strike that—to actually see and go over the plant and properties of the company?

A. Yes, sir, I have been over them several times.

Q. You informed yourself primarily of all of those factors prior to the time that you got the basic data for the determination of composite service lives of Colorado-Wyoming Gas Company properties?

A. That is correct.

Q. You proceeded then with the matters essential for the determination of such composite service lives, did you not?

A. Yes, sir.

Q. Did you in connection with that particular work prepare an exhibit preceded by a written statement which then sets forth in detail the composite service lives determined for property of Colorado-Wyoming Gas Company by you?

A. I did.

Q. Is this the written statement which sets forth the composite service lives at the end of it?

A. It is.

Mr. Lange: Let us have it marked for identification.

The Trial Examiner: It will be marked for identification as Exhibit No. 200.

(Vol. 66, pp. 9608-9611.)

* * * * * *

A. "Colorado-Wyoming Gas Company Determination of Composite Service Lives.

"This exhibit was prepared by me and under my direct supervision, and shows composite service lives, by accounts or property groups, applicable to the gas plant of Colorado-Wyoming Gas Company as of December 31, 1939. The annual straight-line depreciation rates shown in this exhibit have been determined from the composite service lives shown therein.

"In September, October, November, and December 1939, inspections of the physical plant of the company were made by Federal Power Commission engineers. Transmission, compressing, measuring, and general property were inspected. The location, type of construction, operating conditions, degree of maintenance, exposure to weather and other factors causing deterioration, and the extent of accrued physical depreciation and of accrued absolescence were noted for all property inspected. The age of most of the units of property was determined from dates of installation as shown on the records of the company. Op-

erating and maintenance methods were observed, and operating experience was discussed with company officials.

"Service lives and composite service lives have been based primarily on the physical lives of the various units of property; however, consideration was given to other causes of property retirement whenever such factors were determinative. Company records, from the inception of operation, were analyzed to determine the causes of all major property retirements. These included physical deterioration, caused by wear, tear, rust, and the action of the elements; inadequacy; obsolescence; requirements of public authorities; and other causes. Probable future conditions of operation compared with past service conditions were considered. The probable life of the natural gas supply and other factors which have a bearing on the probable service life of the property in each account were taken into consideration. The system was considered a continuing enterprise which will operate so long as a supply of natural gas is available. The net salvage value of the physical plant of the company at retirement is considered negligible, and no salvage value has been assigned.

"In this exhibit 'adjusted book cost' represents the original cost of gas plant as shown in reports presented in this proceeding by accounting examiners of the Federal Power Commission. 'Service life,' as used in connection with this exhibit, means the period during which a particular unit of property is used or performs a useful function in the rendering of service. 'Composite service life,' means the weighted average service life of all units of property within a primary account classification or property group, determined by dividing the total capital in each primary account or property group by the sum of the annuities applicable to the individual units.

"In the following paragraphs, there is given a brief summary of the elements considered in arriving at the composite service lives determined for each account or property group:

"Organization Expense: The articles of incorporation provide for perpetual existence of the company, and grant the company authority to engage in many activities

throughout the world, in addition to its present principal function. Due to these facts, the amounts in this account are not considered to be subject to depreciation or amortization.

"Transmission Lines (Main Lines and Laterals): A total of 55 pipe inspections was made on the main 10-inch, 8-inch, and 6-inch transmission line running from Arapahoe Measuring Station to Cheyenne, Wyoming, and 28 pipe inspections were made on the branch lines, or on the average, one inspection for approximately each $17,000 of investment.

"These inspection locations were selected by the company with the exception of a few additional locations which were requested by engineers for the Commission. Inspections were made in September 1939.

"At each location selected for inspection, a section of pipe approximately 40 inches long was cleaned. The procedure followed by the Commission's engineers at each inspection was to divide a 36-inch section of clean pipe into three 12-inch sections and take 10 or more pit measurements on each section. These pit depths and the general condition of the pipe were recorded.

"In addition, if the pipe was coated, the kind and condition of coating in the adjacent uncleaned sections of pipe were recorded; notes were also made regarding type of soil, soil hydration, drainage, and description of adjacent property. The pipe inspection data, together with calculations relating to them, an analysis of the major retirements as shown on the company's records, consideration of the natural gas supply, and other pertinent information were used as guides in arriving at service lives for the main line and lateral lines. It was concluded that 50 years is a reasonable composite service life for the main transmission line, and, that 40 years is a reasonable composite service life for the lateral lines as a group.

"Transmission System Measuring Stations: Two measuring stations are included under transmission plant: Berthoud field station, west of Berthoud, Colorado, which measures gas purchased in the Berthoud field; and Fort Collins division meter station, which measures gas trans-

mitted to Fort Collins and points north thereof. The property carried under this heading consists of measuring station equipment. This equipment was inspected in the field. The type of construction, condition of the property, and the degree of care used in maintaining it were observed. A composite service life of 27 years has been determined for Transmission System Measuring Stations.

"Compressing Stations: This property group consists of compressing station structures and equipment. Two compressing stations were owned and operated by the company as of December 31, 1939; The Arvada Station, near Denver and the Wellington station, approximately 13 miles north of Fort Collins, Colorado.

"Main engines, compressors and much of the equipment of Arvada station were originally installed at Wellington station. A detailed inspection of both stations was made in the latter part of 1939. Type of construction, condition of the property, and degree of care used in maintaining it were observed.

"An analysis was made of engine-hours operated since installation. All of the above facts relating to past operation and present condition, as well as probable future operations, the probability of retirement due to obsolescence and to depletion of gas supply, were taken into consideration in establishing service lives for this property. A composite service life of 37 years has been determined for compressing stations.

"Distribution Plant: The property carried under this heading consists of land owned in fee, which is non-depreciable, and measuring station structures and equipment. The company owns 37 measuring stations, some equipped with orifice meters, some with positive displacement meters, and some with both types of metering equipment. Measuring station structures are generally owned by the company, but in a few instances are owned by the customer served. Observed condition, past changes made by the company, and service lives determined by others for similar property have been considered in arriving at a composite service life of 30 years for measuring station structures and equipment.

"Transportation Equipment: This account consists of automobiles and trucks. From an analysis of the experience of the company, a composite service life of five years was determined as reasonable for this account.

"Office Furniture and Equipment: This account consists of office furniture, office machines, and similar property. After giving consideration to the kind of property, its use, and to the company's past experience, 15 years was determined as a reasonable composite service life for equipment in this account.

"Miscellaneous Tools: This account consists of miscellaneous tools and maintenance equipment. The physical life of much of this equipment is affected by deterioration with time as well as with use. A composite service life of 15 years is considered reasonable for this account.

"Communication Equipment: This account consists of an iron-wire telephone line from the Wellington compressing station to the main circuits of Mountain States Telephone and Telegraph Company at Wellington, Colorado, strung on the poles of the telephone company. A composite service life of 30 years was adopted for this account."

Q. Mr. Copp, proceeding then in the manner as given in your written statement, you determined composite service lives in the Colorado-Wyoming Gas Company as reflected in the next succeeding page?

A. That is correct.

Q. I will ask you whether the items under the account named and adjusted book cost as of December 31, 1939 in each of those columns was taken from the schedule 1 appearing at page 37, Exhibit 199?

A. Yes, that is correct. It came from Schedule 1, Exhibit 199.

Q. Page 37?

A. Page 37.

Q. And the service lives appearing on this page were computed by you?

A. That is correct.

Q. And those service lives after having been computed by you were then given to the Commission's ac-

countants for their use in connection with the depreciation exhibit?

A. That is correct.

Q. Of course, you had nothing to do with the application of the service life figures in so far as any accounting matters were concerned?

A. No, I merely supplied the service lives themselves to the accountants.

Vol. 66, pp. 9612-9619.)

* * * * *

Commission Exhibit 200 (Appendix this Record).

Cross Examination.

By Mr. McCreery:

Q. Mr. Copp, have you made other detailed depreciation studies of gas properties?

A. Yes, sir, I worked on a similar study of the East Penn Gas Company.

Q. Were you in charge, or were you under someone's direction?

A. I was more or less second in command. The man I worked for spent only part-time on the property.

Q. What was the character of your study there?

A. We were determining service lives for depreciation rates.

Q. For annual depreciation rates?

A. That is correct.

Q. You were not checking the present condition of property?

A. No, sir, I was a permanent employe of the company.

Q. What has that to do with it?

A. I mean I wasn't there just temporarily on that job.

Q. What I meant to say was, you were not at that time making a study of the then condition of the property but were determining service lives?

A. That is correct.

Q. For the purpose of annual depreciation charges?

A. Yes, sir.

Q. In the usual manner?

A. Yes.

Q. Such a study isn't directed to a determination of the condition of the life of a property at any given time, is it?

A. No, you can do this at any period.

Q. You don't in that manner arrive at what happens to be the present condition of property by taking a service life and cutting it in proportionate shares for the years?

A. No, sir.

Q. So this evidence is not offered for that purpose, I take it.

A. That is right.

Q. You have working papers, I take it?

A. Yes, sir.

Mr. McCreery: So if desirable, we can have access to them, Mr. Lange?

Mr. Lange: Yes, the working papers of Mr. Copp will be made available to you.

By Mr. McCreery:

Q. You might just give us an idea of how you arrived at these results. You have taken into account, according to your statement, a great many different factors. Have you applied those factors in some kind of a formula?

A. Not necessarily. They all serve as guides.

Q. What was the determination of how one factor would guide and how another factor would guide? To what extent? How did you weight these guides, Mr. Copp?

A. Well, according to their importance they were all given due consideration. The ones that were considered more important were given more weight.

Q. Suppose we do this: Let's start in at the top and go down the line on the various factors as you gave them importance in their own study. What was the first most important factor in your study?

A. These service lives are based primarily on the physical life and the physical life was given one of the greatest weights.

Q. Naturally: that was the total physical life as you computed it, it was really the starting point?

A. That is correct.

Q. In other words, you started with a 50-year service life and then sort of fitted everything into that?

A. Not everything. Some items we knew wouldn't last fifty years, so we didn't consider fifty years on those at all.

Q. Tell me how you arrived at fifty years on the transmission line?

A. All right.

Q. Let me withdraw that question and I will ask you another one or two preliminary questions.

What consideration did you give to the life of the natural gas supply which serves this company?

A. We gave that consideration.

Q. What consideration?

A. From our calculations concerning transmission lines—

Q. That is right.

A. —the physical life was in excess of fifty years.

Q. Of the transmission line?

A. That is correct.

Q. All right.

A. So we determined, or arrived at what we thought would be the life of the natural gas supply.

Q. And you determined what with respect to that?

A. We determined what we considered would be the life of the supply available to this company.

Q. And had you arrived at a figure of fifty years?

A. We put a figure of fifty years on the transmission lines. The life of gas supply we arrived at was in excess of that.

Q. It was in excess to that?

A. Yes, that is correct.

Q. Accordingly, having arrived at the conclusion that the gas supply would last a greater period than fifty years from the date of acquisition of these properties, it was therefore discarded in your future calculations because your longest service life is fifty years?

A. That is partially true. We didn't want to put a service life on anything when there wouldn't be any gas there.

Q. But you just said you found a longer life of the gas supply than fifty years.

A. Yes. I would like to explain that a little further.

Q. All right.

A. These service lives are average service lives and for particular units of property—some of the units of property that may last in excess of fifty years.

Q. To leave that out you have given a maximum of fifty years as your composite and I assume that is because some of the property would last less than fifty years and some of it would last more than fifty years in your computation, so you concluded fifty years represented the average?

A. Yes, that is, referring to the main transmission line.

Q. That is all I am referring to now. I am taking the longest service life given. You did conclude that the gas supply would last longer than fifty years?

A. That is right.

Q. Whatever effect that had was negligible on further computations?

A. Yes. At that point we adopted fifty years and we forgot the gas supply. We assumed that there would be gas at that time.

Q. So that has no practical bearing on the approach to this problem that you have made?

A. Well, I think it has had a bearing on it because it is one of the rather important factors.

Q. Is it important if it is going to outlive the property?

A. Well, we have considered this property as a continuing enterprise that will operate so long as the gas supply is available.

Q. But we are not considering the enterprise; we are considering the property to which you have given a composite life of fifty years. All of the other property is of a lesser service life. Having found the gas supply is in excess of fifty years, isn't it true that you gave no practical consideration thereafter in this study to the gas supply?

A. Well, since we knew the gas supply would last as long as our longest unit of property, that was the answer there.

Q. That's right.

A. That was the answer there.

Q. And by the way, what number of years' life did you give to gas supply?

A. Well, it depends entirely on the basis that you work it out on.

Q. It apparently does.

A. Well, there are other factors other than the reserve of the field.

Q. Well, in passing I wanted to know what figure you used was all, without going into the geology of it all. I am not trying to go into that.

A. Well, I am not a geologist, to begin with—

Q. I know, but what number of years in your own mind did you arrive at in connection with this study?

A. I have several figures in mind.

Q. All right, I would be interested to hear them.

A. Well, as I said before, the number of years in which I have calculated the gas supply to last depends on several other factors than the reserve of the field.

Mr. Lange: You mean the reserve of the Canadian River Gas Company?

The Witness: I am considering only one reserve, but other factors concerning withdrawal.

By Mr. McCreery:

Q. But your are speaking now of the Amarillo field?

A. That is correct.

Q. But this company, of course, has no gas supply of its own?

A. That is correct.

Q. Go ahead.

A. Well, considering the withdrawals as furnished in Exhibit 80 in this hearing by Mr. Hendee on the Colorado Interstate Gas Company, I have calculated the length of time of 67 years from 1928; that is, basing the withdrawals on Mr. Hendee's rate in Exhibit 80.

Q. Now, what other figures did you arrive at?

A. Well, using the estimated requirements as set forth by Hill of the Federal Power Commission.

Mr. Lange: Mr. Lee Hill?

The Witness: That is correct. I have a total life of 62 years from 1928.

By Mr. McCreery:

Q. Have you another figure?

A. That is all, using the present facilities for—that is, using the present Colorado Interstate line and the present lines and facilities of Texoma Natural Gas Company and Natural Gas Pipeline Company of America. That latter figure that I gave you of 62 years takes into account the possibility of a second line being built to Chicago.

Q. So with those figures in mind you naturally concluded that you didn't need to worry yourself about the gas supply in connection with this study in Exhibit 200?

A. That is right.

Mr. Lange: Well, I think the witness stated that after he had satisfied himself that there was an adequate supply that thereafter, then you proceed with the consideration of other necessary factors?

The Witness: That is right.

Mr. McCreery: That is, dealing with one at a time. I didn't try to distort anything he said.

Mr. Lange: No, I just wanted to make certain that he did not discard the idea of the matter of the reserves when he proceeded to the others.

Mr. McCreery: I think he put them out of mind in this study.

Mr. Lange: No, he said he considered it first and then proceeded to the other.

Mr. McCreery: The last question I asked him was, having arrived at these figures he naturally discarded any further consideration of the gas supply in his study under Exhibit 200 to which he replied, "yes."

Mr. Lange: That is what I wanted to make certain, what he meant there, whether having reached that point he proceeded to the other points of consideration. I think that is the way I gathered from what his testimony meant.

Mr. McCreery: I am getting that one disposed of. I want to weigh each one. Now, this one, as I understand, is not going to enter into our weighting. That is what I was trying

to arrive at. I want to weight these various considerations that moved him to arrive at certain results.

Q. Now, having disposed of that, Mr. Copp, what was the most—what was the next important item that you considered in this study?

A. Well, I don't know which one would be the next important.

Q. Well, let's go to No. 2, then.

A. Is that a question you asked me?

Q. Yes, I meant it as such, yes. This is the background of your study now. The next item of importance, if not the most important, one of the important items. We'll take it that way.

A. Well, we inspected the pipe as to its—

Q. Inspection of plant?

A. That is correct.

Q. Now, what was that inspection of plant to determine?

A. That was made to determine the accrued depreciation or the amount of deterioration which has taken place.

Q. Did that have a relation, then, to your service life of fifty years?

A. Yes, we took that into consideration.

Q. Well, it had a relation?

A. That is correct.

Q. In other words, this plant inspection had a relation to your determination of a fifty-year service life of the—well, we will deal right now with the transmission line for simplicity.

A. We used the results of that determination as a guide in arriving at our fifty years.

Q. All right, now, how much of a guide?

A. It was considered in conjunction with these other things. I wouldn't say. It carried some weight. Exactly how much, I don't know, because in my opinion it is difficult to relate these things mathematically and come out with an answer.

Q. I am having difficulty myself, Mr. Copp, but I wanted to get what your operations had been in this respect.

A. It was used merely as a guide.

Q. As a matter of fact, you would have arrived at a 50-year life with the elimination of any one of the various elements that you did consider, would you not?

A. No, I don't think so. We gave them all due consideration, and I wouldn't like to have dropped out—

Q. Any of them?

A. That's right, any of them.

Q. All right, now, let's take the next one that you gave consideration to.

A. We gave consideration to maintenance.

Q. Maintenance?

A. And to retirements.

Q. Wait a minute. Just a minute. Now, maintenance of the existing plant?

A. That is true.

Q. Then you have retirements of units that had been retired?

A. That is right.

Q. Just one moment on that. Did you know the condition of those units when they were retired? You have no way of knowing that, did you?

A. No, we didn't see all of them.

Q. Did you see any of them?

A. Yes, sir.

Q. And what was the occasion for retiring, various causes?

A. Now, we are speaking only of the transmission line?

Q. Yes, only for the purposes of our present discussion, that's right.

Mr. Lange: Yes.

The Witness: Well, one particular instance, and one of the very few retirements that the company has had to date, was because the pipe had deteriorated.

By Mr. McCreery:

Q. Yes, that's right, and now how many instances of retirement do you know of?

Q. One instance that I remember specifically.

Q. You remember one instance?

A. That is right.

Q. You don't recall of any others?

A. Not offhand. This is still considering only transmission lines.

Q. That's right, and when I leave that I will make it clear. I am not trying to get you confused in the different elements.

A. That's right. I just wanted to get that clear.

Q. You have one instance of that. Did you know where that pipe section—how many sections of pipe in that one instance?

A. I don't recall specifically the number of feet.

Q. Do you recall where it was?

A. Yes, sir.

Q. And the character of the soil conditions?

A. I know some of the conditions surrounding it.

Q. Do you know where it was taken out?

A. That is right.

Q. Did you go and visit that spot?

A. Yes, sir.

Q. What did you find there?

A. I found new pipe had been put in its place.

Q. True enough. I am talking about the surrounding conditions.

A. I don't know whether they have materially changed since that pipe was taken out or not.

Q. You don't know about that?

A. No.

The Trial Examiner: You mean the condition of the soil, Mr. McCreery?

Mr. McCreery: That is what I am geting at—soil conditions, water conditions.

Q. You don't know what the conditions were at the time of removal?

A. Only what I have been told by persons connected with the company.

Q. Do you know what the condition was of soil and water prior to removal?

A. No, I don't.

Q. Now, what is the next element?

A. We took into consideration inadequacy.

Q. Inadequacy. Now, how did you use that?

A. That was considered but not given much weight because it has not to date been an important factor, but it may be in the future.

Q. Just how do you use that term in your study?

A. Well, to cite an example of something that might be inadequate, is the line that supplies Fort Lupton and Brighton, the branch that runs over there. In the future it may not be of sufficient size to take care of the requirements. If the Kuner-Empson Company should enlarge their facilities or require more gas over there, it may not be of sufficient size to take care of their requirements.

Q. Well, now, did you make any factual investigation on the question of inadequacy, possible inadequacy or probable inadequacy in the future as to any part of this system?

A. I talked to the plant superintendent of the Kuner-Empson Company and it was his opinion that they may possibly need more gas over there.

Q. Possibly?

A. That is correct.

Q. And is that the extent of your factual investigation on the question of inadequacy?

A. There are, of course—there is the possibility, of course, and I haven't checked into that thoroughly—

Q. Before you answer it that way, just answer my question first and then you may give your explanation.

A. I made no definite checks as to inadequacy.

Q. Now, go ahead and say what you had to say.

A. If the new Remington Arms plant being built in the vicinity of the Colorado-Wyoming line should want gas, there is a possibilty that there might be inadequate facilities. That is very new and has not been given any consideration.

Q. So of course you are now testifying in 1941 with respect to a determination in 1939 in light of 1941 conditions?

A. Bringing them up to date, more or less.

Q. That's right. You have to do it. You have to live in the present.

A. That's right.

Q. But you made no factual inquiry except some conversation with the plant superintendent of Kuner-Empson Company on the question of inadequacy?

A. I talked to him regarding his requirements and that is as far as it went?

Q. His present or what?

A. His present and future requirements.

Q. As far as he knew?

A. That is right.

Q. Now, what is your next element?

A. The next element is obsolescence. Concerning the main transmission line, that is practically negligible.

Q. So that that element was practically nil?

A. That is right.

Q. And inadequacy was almost nil, wasn't it?

A. It wasn't given much weight.

Q. Slight weight. All right. Now, what is the next?

A. Requirements of public authorities.

Q. Now, what do you mean by that?

A. Well, there are several requirements of public authorities. I think an example of one is where the pipe crosses public roads and where it is now cased.

Q. Pipe—and not cased?

A. That is right.

Q. Now, tell me about that.

A. Well, if some public authority should decide to widen the road or make some changes and they would insist that that line be cased, there is a possibility of a retirement there due to the fact that you might have to take the old pipe out and put in some new.

Q. Instead of casing the line that you have?

A. That is right.

Q. And then, of course, there is the situation where you just simply case the pipe?

A. Yes, you might just case it.

Q. Much would depend upon the condition of the soil and the water levels and so forth adjacent to that particular stretch of pipe, wouldn't it?

A. Well it depends a little on what they tell you to do, I think.

Q. So they might insist on new pipe?

A. That is right.

Q. Even though the existing pipe was all right?

A. That is true.

Q. Do you know of any cases of that kind?

A. Yes.

Q. Not in Colorado?

A. Not on Colorado-Wyoming Gas Company.

Q. That's good. I'm relieved. Now, what other requirements?

A. Another example of public authorities widening the road and where your pipe is so far underground that it wouldn't be worth while removing. It might be better just to retire it and put in some new pipe.

Q. The deeper it is the less likely it would be that the road would disturb it, isn't that true?

A. That is right, but they might ask you to move it out due to the effect of various factors, such as vibration from trucks. This is where they widen the road where the pipe is under the road.

Q. Parallel with the highway or under it?

A. Right under it, not on the side.

Q. All right, now, what is the next one?

A. Well, then, there were other causes.

Q. And no more requirements of public authorities in your mind?

A. Well, not now.

Q. Well, how much weight did this requirement of public authorities have?

A. It was one of the factors that was considered. We didn't give it much weight.

Q. Very slight?

A. That's right.

Q. Now, what is your next? other causes?

A. Yes, there are other causes that should be considered.

Q. Now, what are those other causes?

A. Well, in this particular case the depletion of the Wellington gas field is another cause.

Q. Depletion of the Wellington gas field. Now, just how much weight did you give that?

A. Well, as the system is now constituted, it didn't receive a great deal of weight, although it was given a lot of consideration.

Q. Would you say slight weight to that?

A. Well, I don't like to relate these mathematically because they weren't used that way.

Q. I haven't asked for a percentage, and I have refrained from doing that because it seemed to me that these being in your mind sort of intangible elements, it was proper not to ask that, but certainly I have the desire to know what your mental processes were.

A. Well, as the system is now constituted, that was not given a great deal of weight.

Q. That would be what? Would you say small or slight or what?

A. Well, slight is all right.

Q. All right, now, what else?

A. The possibility of other fuels being substituted.

Q. Other fuels?

A. Yes.

Q. Well, did you give any study to that?

A. Yes, sir.

Q. What bearing did that have?

A. We gave that consideration on one industrial customer, the Colorado Portland Cement Company at *Laport*.

Q. How much weight did you give that?

A. Oh, that was given rather a small amount.

Q. Do you happen to know that at the present time that that contract is probably out entirely?

A. No, I don't know that.

Q. Well, is that slight weight, too, or more than slight weight?

A. I would give it a little more than slight.

Q. More than slight?

A. Yes.

Q. Did you talk to them?

A. Yes, sir.

Q. When?

A. About two weeks ago.

Q. What did they say?

A. They said they had renewed the contract for 1941.

Q. I think you are mistaken there because it has not been renewed, as a matter of fact.

A. Then the man was misinformed that told me that.

Q. Who told you that?

A. Mr. Ballantyne.

Q. Who is he?

A. Auditor.

Q. Now, suppose that you had been told that the contract had not been renewed because they were going to put in coal. Would you have given substantially greater weight to this, then?

A. I might have.

Q. Well, I mean, would you?

A. Yes, I think I would have, but I also know that the same thing came up last year and the contract was renewed—it wasn't renewed until just before they started taking gas.

Q. That is always possible. I understand that. Now, what other elements?

A. I think that's about all.

Q. Now, how much weight did you give to your retirements, based on the one instance that you had in mind?

A. They weren't given very much weight because the retirements of this company concerning pipe are rather small.

Q. What about maintenance?

A. That was given more weight.

Q. And maintenance has been very excellent, has it not?

A. The quality of the work has been very good.

Q. Yes. Has the maintenance been good as a whole in your judgment as an engineer?

A. Yes, I would say that it has.

Q. So you gave considerably more weight to that?

A. No, not necessarily.

Q. No?

A. I gave consideration to the amount of maintenance that has been done in the past and what probably has to be done in the future.

Q. That's right, but did you give slight or some or considerable weight to that?

A. Well, of course, slight and some and considerable are all kind of relative.

Q. You use a word, then.

A. Well, those words are as good as I could use.

Q. Well, you select one of them.

A. It has been given a small amount.

Mr. Lange: We are still talking about the main transmission line?

Mr. McCreery: That is what I told him. I told him when we would depart from that, and I will so indicate it.

Mr. Lange: Yes.

By Mr. McCreery:

Q. Now, I think in your statement you referred to other things, other things with respect to some of the items of property. I don't know whether you gave any weight to the experience of others in this part of your study or not.

A. I wouldn't say we had.

Q. None whatever—experience of other pipe line companies?

A. Yes, I would like to correct myself there. It has been given a slight amount.

Q. That is, the service life of pipe in other gas lines?

A. Not so much concerning the service life as the maintenance, I think, was given a little more consideration, of other companies.

Q. In what way?

A. Well, I know of lines that are in similar territories and what their maintenance has been in the past, and naturally that was in my mind when we thought about Colorado-Wyoming.

Q. So you considered other companies, then, on maintenance?

A. To the degree of maintenance that they performed.

Q. In considering the service life, you say you did not consider other companies at all, other pipe lines?

A. To a very minor extent.

Q. All right. Now, are there any other elements that entered into your consideration?

A. I don't think so.

Q. Did you consider such things as perhaps floods or storms or anything of that kind that might be visited upon the pipe lines?

A. Oh, yes, that comes under other causes. That is kind of a catchall. We can put it that way in there.

Q. That is very slight weight?

A. It is concerning Colorado-Wyoming, because I know of only one instance where they have had trouble from that cause.

Q. I am not trying to impose it upon you as a ground. I am just trying to find out what grounds you did use.

Now, you also examined the books of the company to see

the date that the elements of this line were put down, did you not?

A. That is right.

Q. So the date of installation was entered into your calculation?

A. Yes, that is true.

Q. And what weight did you give to that?

A. Well, that was given some weight, more than small, I would say.

Q. Substantial weight?

A. Well, not too substantial, but it was given some.

Q. Weight, but not too much?

A. That's right.

Mr. McCreery: All right.

The Trial Examiner: The hearing will stand in recess for five minutes.

(At this point a short recess was taken, after which proceedings were resumed as follows:)

The Trial Examiner: The hearing will be in order.

By Mr. McCreery:

Q. Now, Mr. Copp, what do you mean by composite life?

A. Well, I think that in the written statement on Page 2 it sets that out: "Composite Service Life means the weighted average service life of all units of property within a primary account classification or property group."

Now, that was determined by dividing the total capital in each primary account or property group by the sum of annuities applicable to the individual units.

Q. Well, now, for instance, let's take up the transmission lines. Now, you have 10- 8- and 6-inch lines. How many groups did you divide those into?

A. They were considered as one group.

Q. So that your figure there was not a composite, it was just a single figure?

A. It was a composite in so far as it related not only to pipe but to the fittings attached to it.

Q. I am dealing now with the pipe. That was one figure on the pipe?

A. That is correct.

Q. So you didn't have from the point of view of the pipe itself, that being the principal part of the transmission lines, any composite. It was all the same from Littleton to Cheyenne, was one unit in your study?

A. In the final analysis it was, but in determining—or considering the physical life as a guide, it was not. It was taken in groups according to sizes and wall thickness.

Q. Well, now, let's see. Have you got your working papers on that?

A. Yes, sir.

Q. To show all these groups?

A. That is right.

Q. So we can observe those?

A. That's right.

Mr. Lange: You have those with you, have you, Mr. Copp?

The Witness: Yes, sir.

Mr. McCreery: We can't do it during the course of the hearing very well.

Mr. Lange: I just wanted to be sure that he had them here so we could make them available after the hearing.

By Mr. McCreery:

Q. Just in general, how did you do that with respect to the pipe?

A. Well, we have given the physical life of the pipe considerable weight in determining the service life.

Q. Now, the physical life and the service life, what's the difference?

A. Well, the service life means the period in which this pipe is used and performs a useful function. The physical life is how long it can actually be in service.

Q. And which is the longer?

A. The physical life is slightly longer than the service life we have given it.

Q. Now, then, go forward from there.

A. Well, we made a lot of calculations as guides that were used in determining the service lives and these calculations were—

Q. What were those calculations?

A. Well, they were made from data obtained duing our pipe line inspection.

Q. In determining the service life of the pipe which you finally concluded for the overall was fifty years?

A. That is correct.

Q. What is the principal factor which you have, as an engineer, in determining the service life of a piece of pipe?

A. The deterioration was considered as the principal factor.

Q. The deterioration as of when?

A. As of the time of the inspection was made.

Q. Then you set a certain percentage, we will say, and you apply that on a straight line basis on the theory that your deterioration is the same from year to year, is that true?

A. We use the straight line basis.

Q. Well, I asked it a little differently, if you will respond to the question.

The Trial Examiner: Read the question, Mr. Reporter.

(The question referred to was read by the reporter, as set forth above.)

The Witness: We didn't exactly determine the percentage.

By Mr. McCreery:

Q. You didn't at any time determine the percentage?

A. That's right.

Q. You are getting into the realm of sort of non-mathematical judgment, is that it?

A. In the final analysis, that is right.

Q. You never did get to a percentage?

A. We determined a physical life for each of the different sizes of pipe in the line and then we arrived at a composite for all of them.

Q. You mean total physical life?

A. That is correct.

Q. And you looked on that in 1939—you looked back at 1928 and looked forward to '88, something like that—

A. That is right.

Q. Standing in the middle you say "There it is, and here it is, and this is the total"?

A. That is right.

Q. Now, that assumes what—a perfectly uniform set of conditions during the whole period, does it?

A. That is right.

Q. And what you were trying primarily to find and what you did find and what this exhibit shows is the service life?

A. That is right.

Q. And that is all you are trying to show by this exhibit?

A. That is all.

Q. Now, I want before going further to refer to the top of Page 3 on "Organization Expenses." I note that in view of the fact that this company happens to have a perpetual corporate existence, you accept that as the basis for determining that therefore there is no depreciation, although the service life of—the longest service life you attribute to any of its property is fifty years, yet you give no depreciation whatever to the organization expense merely because it is incorporated in that manner?

A. That's right. The charter is perpetual.

Q. Of course, you know very clearly that any corporation can renew its charter indefinitely, don't you?

A. That's right.

Q. So that your picture would have to be the same whether the corporation was incorporated for twenty years or perpetually, wouldn't it?

A. Well, this charter says it is perpetual, so it wouldn't—

Mr. McCreery: Read the question, please.

(The question referred to was read by the reporter as set forth above.)

Mr. McCreery: Being aware of the fact that under the law you can extend your corporate life as often as you want to.

Mr. Lange: Right at that point, I think we are getting into the realm of law.

Mr. McCreery: The witness has already stated, Mr. Lange, that it can.

Mr. Lange: I don't believe he knows whether a corpora-

tion can renew its charter. He says that it is for an indefinite period.

Mr. McCreery: I will ask it in a hypothetical manner, then.

Q. Mr. Copp, supposing the corporation can renew its articles of incorporation as many times as it wants to under the existing law. Would you find, then, that such a corporation would be in the same position as a corporation which happened to have what you call a perpetual charter?

A. I would say yes, assuming that is possible.

Q. Yes, assuming that is possible legally, and assuming that a corporation can continue its corporate existence, then, indefinitely by renewals, you would say, then, that organization expense in no case should be depreciated at all, would you, following the analogy of your conclusion in this case?

A. That is right.

Q. Do you know whether that is done or not?

A. Whether charters are renewed perpetually?

Q. No, whether that theory of yours is followed?

A. I think it is.

Q. You are not sure of that, though? You wouldn't want to say that?

A. That is bordering a little on the legal aspect, I think.

Q. I think so, yes. So that the fact, after all, of a limitation on the life of the plant would be no limitation to your mind—which would entitle a retirement of the organization expenses?

A. Well, I think it would be, if—if it specifically designates any specific line of business, when that company was done, that's all they go into.

Q. But we found that the life of the field is going to be in excess of the life of the property, and with the expiration of the life of the property, what is the corporate organization worth?

A. Perhaps I haven't made myself very clear. The life of the field is in excess of the service lives we have set.

Q. So our service life is fifty years as a maximum for the property of this company.

A. That again it must be considered is an average service life.

Q. All right, let's consider it. Make your figure what-

ever you want. I don't care what your figure is for the purpose of this question, but there is at some point even with the last item of property, a wearing out point, is there not?

A. Yes, there is.

Q. All right, now, we have got a wearing out point, wherever you want to place it. Now, what good is the corporate organization after that?

A. This particular company is not limited to the transportation of natural gas.

Q. But it was organized and functioning. The mere corporate charter is not what we are talking about, it is the organization of this company for this business, isn't it? Of course, you are aware of the fact that to start in a brand new business, in order to get the articles of incorporation, it is incidental as compared with the other preliminaries of organizing and starting in business. You are familiar with that, from your own business experience?

A. All right.

Q. So that after all, if there is an end of the life of this property, isn't that the end of this corporate setup as made to do this business?

A. I am not so sure it is because the company may under this present organization go into some other sort of business.

Q. Let's assume for the purpose of this question that a corporation can engage in one line of business and can amend its articles to engage in any other line of business, and we will assume that that can be done by law; then any company would be in the same position as this company, wouldn't it, with respect to perpetuity of existence and character of its operations, if as I have assumed, that you can take care of either, readily, under the law?

A. Well, if you can do everything that you say you can, then that is true.

Q. Then you would depreciate it under those circumstances?

A. It would be depreciated if it were limited to this one thing, but in the case of the Colorado-Wyoming Gas Company is not limited.

Q. And so that is the basis. Now, when you say "depreciation," what you mean is "retirement," isn't that right? You can't in any strict sense depreciate organization ex-

penses. They are retired. The depreciation is a physical process, isn't it?

A. Generally speaking.

Q. That's what I mean. So that this means a retirement life, doesn't it?

A. Now you are speaking of organization expenses?

Q. Yes.

Mr. Lange: Mr. McCreery, I believe it says in that paragraph, "depreciation or amortization."

The Witness: Yes, I was just going to mention amortization.

Mr. McCreery: I was trying to get it clear in the testimony. I wanted the testimony to be clear on it, is all.

Q. It is simply a retirement, isn't it, if you allow it? Now, you don't allow it here, but now, supposing we had a corporation of the type that you say which has a limited corporate life and is dedicated under its existing articles to one particular line of activity. Under those circumstances would you have allowed the retirement there?

A. It could be amortized.

Q. All right, you would have amortized it, would you, in this exhibit?

A. If it had been limited to a particular field.

Q. A particular field and for a particular time.

A. That is correct.

Q. You would have then amortized it?

A. Yes.

Q. And what would have been your period of amortization—the longest life of any element of property or the shortest life?

A. The longest life.

Q. So even though an other part of your system is only good for forty years, you would still amortize this over the fifty years after you had worn out your distribution system, is that right?

A. Well, the property would still be operating.

Q. Of course, we are just talking about book entries now, aren't we? That's all these amount to really.

A. Well they are used in connection with accounting.

Q. That is what I mean, yes. I want to take the oppor-

tunity to look over your work sheets, so I will go forward from here.

Now, your main line, you have given a service life of fifty years to that.

A. That is correct.

Q. And to the lateral you have given a composite service life of forty years?

A. That is right.

Q. Now, on what basis did you arrive at that distinction?

A. On the lateral lines the physical condition was given considerably more weight.

Q. On the lateral lines, physical condition was given more weight?

A. It was not given more weight than on the transmission lines, but our guide calculations concerning lateral lines showed them to have a shorter physical life than the main lines.

Q. Where are your guide calculations? Have you got those in your working papers?

A. Yes, sir.

Q. You will produce those, will you?

A. Yes.

Q. What do you call them—guide calculations?

A. That's right.

Q. All right, and what was the basis upon which those guide calculations, for instance on the laterals, showed forty years and on the main lines showed fifty years? What was the principal basis for that difference?

A. It was due primarily to the condition in which we found the pipe on the lateral lines.

Q. So that you say you gave more consideration to the condition of the physical conditions on the lateral lines than on the main lines?

A. No, we gave considerable consideration to the physical condition of both lateral and main lines, but the result of our calculations on the lateral lines showed a shorter physical life than for the main line.

Q. You mean a total over all service life?

A. That's right.

Q. Now, have you got a table by which you work out this composite forty-year figure picture?

A. I have working papers showing the guide calculations on it.

Q. I wish you would prepare copies of these calculations so that we may have them.

A. They are rather extensive. They cover this whole book.

Q. It is a whole book of them. I wonder, can we arrange, say, the first thing in the morning to go over those with you before the hearing commences?

A. Any time that is suitable to you.

Mr. Lange: Any time that you suggest, Mr. McCreery.

Mr. McCreery: Could we arrange to go over them with you at 9:00 o'clock in the morning?

The Witness: Yes. This evening will be all right.

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* * * * *

Q. Mr. Copp, in connection with your study embodied in the document marked Exhibit No. 200, you stated yesterday that you had certain guide calculations which were considered by you in connection with this study?

A. That is right.

Q. How many of those guides did you work out?

A. We worked out guide calculations for pipe—

Q. I mean with respect to pipe, limiting it to that.

A. We worked out three sets.

Q. You worked out three sets?

A. Yes.

Q. And your first guide set of calculations as you applied that to this, what service life did you get?

A. By using various factors we got different answers.

Q. I appreciate that you did have what you might call your No. 1 calculation there—

A. That is true.

Q. What service life did you get, applying that in your own way to this situation?

A. That was approximately 137 years on this first method.

Q. 137 years on this first method?

A. That is concerning the main line only.

Q. I mean, we are confining our testimony to that until I change, so that will be understood with you.

A. All right.

Q. Now, with respect to the second method which has other factors or modified factors, as you applied that calculation to the service life here involved, what service life did you get?

A. That was slightly in excess of one hundred years.

Q. Slightly in excess of one hundred years?

A. Yes.

Q. Now, on your third method of calculation as you applied it to this situation, what service life did you get under that one?

A. Approximately fifty-five years.

Q. Approximately fifty-five years?

A. Yes.

Q. Now, these, as I understand, were only guides to you?

A. That is true.

Q. But having arrived at these results, I suppose you followed a new formula beyond that point?

A. That is true.

Q. With these as guides and with the other circumstances that influenced your judgment, you finally arrived at a figure of fifty years?

A. That is correct.

Q. And it was after considering all of those things?

A. That is correct.

Q. And you would be unable to state as to just what extent any particular guide or element influenced your thought to enter into the final figure?

A. No, definite percentage was used in any investigation.

Q. It was these various ideas or elements that entered into your final figure in non-percentable degrees, if there is such a word?

A. That is correct.

Q. Now, when you say main lines, does that include the laterals?

A. No, sir, that includes the main line from the Arapahoe metering station to Cheyenne and the 2-inch Berthoud field line is also included under that heading.

Q. That being true, it would not include, for instance, all of the 8-inch line, would it?

A. No, sir.

Q. It would include a part of the smaller line below six inches in so far as the Berthoud field line is concerned?

A. That is correct.

Q. It would not include all of the 6-inch line, either, would it?

A. No, sir, only the portion extending from the Fort Collins measuring station to Cheyenne.

Q. To Cheyenne—other six-inch lines would not be included in your grouping of main lines?

A. That is correct.

Q. And the main line, then, you gave a service life, arrived at in your own manner, of fifty years?

A. That is true.

Q. Then on the lateral lines which included numerous sizes from eight inches down, I take it, you figured those lines at a service life of forty years?

A. That is correct.

Q. And in connection with those lateral lines, were any of the formulas used as calculating guides to you?

A. Yes, we went through the same procedure and used them as guides.

Q. And you calculated, I suppose, the service life under these various formulas with respect to these lateral lines, similarly, as in the case of the main line?

A. That is true.

Q. And did the service life that you obtained with respect to the main lines vary materially in the case of laterals? Take the first formula, you said you got approximately 137 years on the main line. What in applying that formula did you get as service life of the laterals?

A. Considering the laterals as a group and separate from the main line—

Q. Yes, that is what I mean.

A. —the first method gave us approximately 164 years.

Q. How much?

A. 164 years.

Q. Now, applying the second method to the laterals as a group and excluding the main lines, what service life did you get?

A. Approximately 92 years. I would like to say at this point that there is no consideration given here to a time limit. This is just an indefinite time period.

Q. With respect to the availability of gas?

A. That's correct.

Q. Now, by the third method, and applying that in your way to the lateral lines as a whole, what service life did you arrive at there?

A. Approximately 35 years.

Q. Now, going a little further to the transmission system measuring stations, within that group you covered, according to your statement, part of your Exhibit No. 200, you covered two measuring stations?

A. That is correct.

Q. And those stations were the Berthoud field and the Fort Collins division station?

A. That's right.

Q. Now, in connection with your study of those properties, did you consider the various elements that were detailed yesterday to which you gave consideration on the pipe line?

A. Yes, I would say we considered most of them.

Q. And in addition, did you have any further elements which you considered in connection with that? Perhaps I can make it more direct so as to save time. Were there any structures in connection with the measuring stations in question?

A. Fort Collins division metering station has no structure. Berthoud field measuring station does have a so-called structure.

Q. But of insignificant value?

A. Yes, sir.

Q. So that in considering those two stations you were dealing merely just with equipment?

A. That is correct.

Q. Now, then, did you consult manufacturers of equipment?

A. We took that into consideration.

Q. Did you also take into consideration the experience of other companies with such equipment?

A. To some extent.

Q. You did that to some extent, and added that to the elements which you previously detailed as having been used in connection with the main line study, so that all of these additional elements come in—these elements come in in addition to the other elements that you have already described, as I understand it?

A. That is true, but this is based more on physical lives.

Q. I mean, there is no percentages yet in this, either, is there?

A. No percentages.

Q. But you gave more weight to physical lives, is that right?

A. Yes. This is based primarily on physical life.

Q. And just what percentage of influence in your judgment these other elements had, you would be unable to state?

A. That is correct.

Q. I take it that you gave here, as you did in the other study, consideration to maintenance?

A. That's right.

Q. And did you compare that maintenance with maintenance of other properties that you had any knowledge of?

A. Oh, I think you more or less do that automatically. This company was taken on its own basis a lot.

Q. I suppose that you considered the history of maintenance by this company?

A. We knew what the maintenance had been in the past.

Q. Now, isn't there always a shadow line between what might be taken care of as maintenance and what might be considered wear and tear—natural wearout of parts of this type of equipment?

A. Well, of course, maintenance is designed to keep the—

Q. I appreciate what it is designed to do, but I asked you whether or not that might not be the fact.

A. There might be border-line cases. It's hard to tell.

Q. There usually are, aren't there, in this type of inquiry?

A. Yes, I think there might be.

Q. You didn't give much consideration to that, though, did you?

A. Yes, we considered what had been done in the past.

Q. How specifically did you consider that, Mr. Copp?

A. Well, as a matter of fact, there has been very few retirements or replacements of any consequence on this company's lines or stations, so it didn't play a very big part.

Q. So that what you considered as maintenance replacements played no substantial part in your consideration?

A. Will you read that question back, please?

(The question referred to was read by the reporter as set forth above.)

The Witness: Well, as I recall, there have been very few replacements, so naturally they didn't play a very big part.

By Mr. McCreery:

Q. So you say that that element—that consideration did not play any substantial part under the circumstances of your particular inquiry?

A. It was given consideration.

Q. Just what, you wouldn't be able to say?

A. That is right.

Q. Now we come to the compressor stations as a group. Those I take it consists both of structures and the equipment in those structures?

A. That is right.

Q. And in considering the structures, did you in addition to the elements which you gave consideration as you detailed yesterday afternoon, also communicate with manufacturers of material which would go into that type of building, such as steel?

A. Yes, that is right. I talked to the local manager of the Truscon Company.

Q. That being the company who had furnished the steel in the construction of these buildings, or they furnished similar materials, if they didn't furnish these?

A. Yes, these are Truscon buildings.

Q. You found from them what they estimated the service life of that steel construction to be?

A. They told me what their experience had been.

Q. As a matter of fact, you adopted that figure as your service life, did you not?

A. Not wholly. We considered it and gave it considerable weight.

Q. They gave you a figure of fifty years, didn't they?

A. No, they didn't give us a specific figure of that long.

Q. But you gave it a figure of fifty years?

A. That is correct.

Q. When you came to the equipment, such as engines and compressors, did you similarly communicate with the manufacturers of engines of that type?

A. Not directly.

Q. Not directly, but you gained what you considered was the view that they had as to the service life of that kind of equipment?

A. We had no direct communication with the manufacturers.

Q. I understand that you didn't, but you indirectly got their views upon that problem, did you not?

A. No, I wouldn't say that we did at all.

Q. What did you get indirectly in respect to their position?

A. We didn't get anything because we didn't communicate with the manufacturers—

Q. Directly, I understand—

A. —or indirectly, either.

Q. Did you base it on the experience of certain other companies?

A. We gave that some thought.

Q. Was there any particular company's equipment that you considered?

A. No, there was no specific company. We knew of several that had similar types of equipment.

Q. What companies did you happen to know of that entered into your thoughts in connection with this matter?

A. I know that the Hope Natural Gas Company has had equipment in service longer than this.

Q. That was in your mind?

A. That is right.

Q. What other companies, Mr. Copp?

A. Oh, I know that certain of the companies of the Columbia group—as to the specific company, I am not certain.

Q. I don't care about the names; I am just trying to get a general picture.

A. The Columbia—

Mr. Lange: The Columbia Gas & Electric Corporation?

The Witness: Yes.

By Mr. McCreery:

Q. Why I was inquiring was because in this study you had defined and given a non-percentage to those facts, the experience of other companies.

A. It was given consideration.

Q. You wouldn't again be able to say how much you gave to that?

A. No, that was an indeterminable amount.

Q. It is sort of like the cook giving a formula, you would add this and that and get the result; that is the way it was, wasn't it?

A. You might say so.

Q. I see you have shown on your exhibit here what is known and described as distribution plant. Now, as I understand that, you simply adopted whatever separation of facilities that had been made and given to you for that purpose by the accounting department?

A. That is correct.

Q. There is no engineering involved in the setup here of a certain property under distribution plant in so far as the engineering department is concerned?

A. That is correct.

Q. Did you follow the same course with respect to what is called distribution plant as you did with respect to the measuring and compressor plants in general?

A. Yes. In general the type of structures of distribution measuring stations are a little different than they are on the other two items.

Q. The distribution plant is almost entirely the meters at point of sale together with the necessary equipment attached to them?

A. That is right.

Q. So that is largely the meters at point of sale by the company to either its industrial users or its resale customers? In other words, direct sale customers such as the various public authorities? Isn't that in fact what was included in that distribution given to you by the accounting department?

A. Under the heading "Distribution Plant" are included the structures, the majority of which are owned by the company, and the metering and regulating equipment that is housed in those structures.

Q. As a matter of fact, wouldn't you perhaps desire to correct your statement as to ownership there? You don't know whether they were all owed by the company, do you?

A. I inquired as to their ownership. I understand there are several structures not owned by the company.

Q. You are stating that as a fact?

A. I prefer to let it stand as it is.

Q. That is your understanding?

A. Yes.

Q. Now, on your transportation equipment, that is the automobiles, I take it?

A. Yes, automobiles and trucks.

Q. You based your determination of service life, you stated, on the previous experience of the company with automobiles?

A. That is correct.

Q. And on that previous experience you simply set a service life of five years?

A. That is right.

Q. You didn't see the automobiles, did you?

A. Yes, sir, every one of them.

Q. What procedure did you follow with respect to office furniture and equipment?

A. We looked at all of the principal items. They are practically all housed in the company's main office in the Continental Oil Building. We studied the company's retirements, the ones they had had, and applied that where they were applicable. The equipment other than that we assigned a service life to.

Q. In assigning a service life, that was largely based upon your study of the company's previous experience with this class of property?

A. A great deal of it was.

Q. Was that similarly your practice with respect to the item called Miscellaneous Tools?

A. As I recall there was not much past experience on tools. There is not very much money in that particular account.

Q. I appreciate that amounts to just a few hundred dollars.

A. That is right. We applied what we thought would be a reasonable service life to that type of equipment.

Q. There is another small item, this communication equipment, which as we both understand is largely our telephone facilities attached to the structures of the Mountain States Telephone and Telegraph Company, isn't that true?

A. Yes, that is right.

Q. What did you do, base that largely upon what you considered the service life of the wire?

A. Yes, as wire and labor are the principal items in that account.

Q. Did you give labor the same life in your retirement procedure as you did the wire?

A. Yes, that is right.

Q. How did you determine the life of the wire, from what sources?

A. As I remember, the life assigned to wire was—the service life had been adopted by others.

Q. The experience of others under similar circumstances as you considered them *analygous*?

A. That is correct.

Q. You considered the life of wire of this type?

A. Of this type wire, yes.

Q. You did?

A. Yes.

(Vol. 67, pp. 9661-9676.)

* * * * *

Q. Mr. Copp, in connection with the service life given to the main transmission line and laterals of the Colorado-Wyoming Gas Company, as I recall you arrived at a figure of fifty years for the main transmission line and forty years for the lateral line as a composite figure.

A. That is correct.

Q. Are you familiar, also, Mr. Copp, with the similar study conducted with respect to the main transmission line and lateral lines of the Canadian River Gas Company and Colorado Interstate Gas Company?

A. Not definitely. I made none of the calculations on those companies.

Q. Without having made any of the calculations you were, nevertheless, familiar with the work that was being done by your department?

A. That is correct. I know generally what they are doing.

Q. Do you recall as shown by Exhibits 177 and 178 in these proceedings that the composite service life of the main lines of each of those two companies was also set at

fifty years and that the composite service life of the lateral lines of each of those companies was set at forty years, which is identical with the figures set up with respect to those two classes of lines of the Colorado-Wyoming Gas Company?

A. I only know that to be true of the main lines. I do not know that to be a fact for the lateral lines of either of those companies.

Q. Do you know as a matter of fact, that both the main lines and the lateral lines of Colorado-Wyoming Gas Company and of the two other companies named are wholly independent in construction, in size, in character of country traversed, in the maintenance that has been given to those lines during the period since their construction? In other words, that they are wholly separate in every respect and have been from the date of their construction to the present time?

A. I know, of course, that the same contractor didn't build Colorado Interstate Gas Company line or Canadian River Gas Company's line that built the Colorado-Wyoming Gas Company's line. As to the method of maintenance, I don't know too much about what is done on Colorado Interstate or Canadian River Gas Company's lines.

Q. And you don't know as to the difference in the size of pipe or thickness of pipe walls or anything of that nature when comparing the lines to the line of the Colorado-Wyoming Gas Company?

A. Generally in size of lines I know. I don't recall what the wall thickness is.

Q. They are larger lines?

A. That is correct.

Q. Does it occur to you to be more than a coincidence that these three studies should arrive at identical results with respect to these three separate and distinct properties?

A. They were worked entirely independent.

Q. There was no consultation at all?

A. Some of the people worked on the same ones, but I mean they didn't use the results of one company for another company.

Q. Did they start at the same point with each of the companies with some predetermination?

A. As to what the final answer would be?

Q. Yes.
A. No, sir.
Q. In so far as you know?
A. In so far as I know, they didn't.
Q. Now, in connection with your service life valuations on compressor station structure equipment and measuring stations, with respect to the various items of property prior to the time you arrived at your composite average, you generally put down a period of life in round numbers, didn't you, in all cases such as even zeroes of lives in years?
A. We assigned service lives to the various units comprising the items of property that you have mentioned. They were more or less in round numbers.
Q. Isn't that true with respect to every single one of the items in those classifications of property, that they were all round number figures without exception? Without looking it up, I will say "practically all of them," if it will save time.
A. If I may refresh my recollection a minute I can answer you more correctly.

The figures used before we arrived at the composite were more or less generally round figures.

Q. I don't know whether you answered the question or not. I asked you whether you considered it just a coincidence that the service lives attributed to the main lines and lateral lines of each of these companies—the composite service lives should be identical?
A. I think you could say that it was a coincidence if it came out that way.

Mr. McCreery: That is all, Mr. Copp.

The Trial Examiner: Do you have any redirect, Mr. Lange?

Mr. Lange: At this time we want to tender Mr. Copp with reference to any of the engineering matters that pertain to Exhibit No. 199 that counsel may want to interrogate him about. Those are matters that the accountants received from the engineers in that exhibit.

Mr. McCreery: The Wellington-Arvada compressing station transfer is what you refer to?

Mr. Lange: Yes.

Mr. McCreery: I think there is no inquiry on those schedules.

Mr. Lange: Very well, Mr. Copp may be excused from reference to that exhibit as well as Mr. Vaught on Exhibit 199?

Mr. McCreery: That is right.

(Vol. 68, pp. 9888-9892.)

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Commission Exhibit No. 201 (Appendix this Record).

Annual and Accrued Depreciation (Commission Ex. 201).

KENNETH L. SMITH, Examiner of Accounts, a witness on behalf of the Commission, presented Commission Exhibit 201, entitled, "Annual and Accrued Depreciation of Gas Plant Accounts and Examiner's Adjustments," Colorado-Wyoming Company, for the years 1926 to 1939, inclusive.

He testified as follows:

Q. Mr. Smith, you have been sworn and have testified in these proceedings, have you not?

A. Yes, I have.

Q. In your previous direct examination I asked you with reference to the period of time that you devoted to your portion of the accounting work on this assignment in connection with Colorado-Wyoming Gas Company, isn't that true?

A. I think possibly that question was directed to the whole assignment.

Q. Now, relating particularly to this assignment, rather to the portion of the assignment having to do with the preparation of an exhibit on annual and accrued depreciation of gas plant accounts and your adjustments, I will ask you whether in connection with that portion of the work you have any particular statement to make as to the character and kind of records found in the company's files, as well as the particular treatment or consideration you gave to that situation.

A. Well, I might make a general statement that wouldn't necessarily be limited to this exhibit.

Q. Very well, limit it to this company.

A. All of the accounting investigation on Colorado-Wyoming Gas Company was done either by me personally or under my direction and supervision. I spent about three or four months in the company's offices in Denver, Colorado, actually on the job examining records and making analyses.

In addition to that I probably spent another two months or three months exclusively on this company preparing reports and at all times the work was under my direct supervision whether it was carried out by Mr. Vaught or some other member of the staff. It might be appropriate to make some comment concerning the records of the company.

The Colorado-Wyoming Gas Company had not considered itself a public utility, at least prior to the passage of the Natural Gas Act, and so far as I know was not regulated by any regulatory body. Its records did not in my opinion meet with the standards that I have generally come in contact with in public utilities that had to meet the standards of regulation. I am not saying that in any reflection on anybody in the company or any reflection on the results which we have been able to work out. I merely mean to say that we had to approach the audit a little bit differently than if we had found all of the records and all of the support in the shape we would have liked to have found them, and we undoubtedly spent a great deal more time on that assignment than we would have if we could have located all of the records.

Now, in this, especially as we would expect to find in a larger company and one which was subject to regulation and maintained good records, particularly good plant records, Colorado-Wyoming Gas Company did not have a plant ledger. It had a work order system but it was not always possible to trace the entries on the ledger—on the vouchers into the final distribution that was made in the plant primary accounts, and it did not have a work order system for maintenance jobs. A great many transfers and some retirements of property were made without using a work order system, and we found in some of the earlier

rrcords particularly that there were certain stores tickets that we were unable to locate, and the supporting data for transfer vouchers which are nothing more or less than journal entries, called by the name of transfer vouchers—it was sometimes difficult to locate and there was considerable delay at times in having those run down by the company employes.

The company did not keep—did not have to show us time tickets on the work performed by company employes. That was not of a great deal of significance to us except that portion which was capitalized. They did have payroll distribution books. Undoubtedly there had been a basis for that record as recorded at the time, but the time tickets showing an absolute record of how the employes spent their time, particularly on capitalized charges, did not exist.

In the earlier days of the company a great many charges originated on the books of Henry L. Doherty & Company and those charges were transferred to the Colorado-Wyoming Gas Company without supporting data, simply a book entry, and of course that feature made it difficult from an auditing point of view.

I think those items that I pointed out will show some of the conditions from an auditing point of view that we had to deal with, and I think it has been appropriate to point these things out probably for this reason: In Mr. Vaught's testimony yesterday it seemed to me that the impression might have been left in the record that we went into the books of this company and took everything away from them that we could, and that, of course, is in my opinion not the way the record should stand. We did make certain adjustments which were reflected in Mr. Vaught's exhibit, and many many items we passed as proper capital charges, charges that originated in these records, or lack of records that I have just referred to, and worked with the company. When we felt as though they had given us the best they could in the way of support, we thought we were reasonable in passing a great many charges on which we weren't entirely one hundred per cent satisfied from an auditing point of view that the support was there or as to just what the charges actually were. It has not been a one-way proposition at all, and that is the reason why I

have taken this time to state it for the record in just this way.

So far as the company's effort to get information, they cooperated with us one hundred per cent at all times. We handled these matters informally and at the suggestion of Mr. Davis, Secretary of the company, rather than putting everything in writing, and I believe that the company produced every bit of evidence that they could. There was simply the fact that their records were not as good as they might have been if they had—particularly if they had been looking forward to this sort of thing.

Q. In other words, in connection with those items of information that you may have desired to complete your search, although the company supplied what it had, there were times when it did not have those records available—either they weren't in existence or they had not been kept in such form that the information could have been obtained?

A. Yes. The examples are stores tickets that were absolutely lost and we never did locate them—spent a great deal of time looking for certain matters. We did the very best we could and I think the company did too, but I didn't want the impression to stay in the record that it had been a one-way proposition. I think we did this audit on a give-and-take basis.

Q. And as I understand from your previous statement, you were in full charge of the accounting work in connection with this proceeding in so far as Colorado-Wyoming Gas Company is concerned?

A. That is correct.

Q. And all of its accounting exhibits in this proceeding with reference to that company were prepared under your direct supervision?

A. That is correct.

Q. Now, proceeding to the next specific exhibit; that is, the one which was prepared directly by you, I will ask you whether or not you prepared this exhibit on annual and accrued depreciation of gas plant accounts and Examiner's adjustments in connection with Colorado-Wyoming Gas Company?

A. Yes, sir.

Q. This is the exhibit which I now show you?

A. That is correct.

Mr. Lange: Will the reporter please identify it?

The Trial Examiner: It will be marked for identification as Exhibit No. 201.

(Exhibit 201, Witness Smith, marked for identification.)

By Mr. Lange:

Q. Mr. Smith, did you in connection with the preparation of this exhibit No. 201 also prepare a written statement which summarizes the contents of the exhibit and explains some of the details of it?

A. Yes, I have.

Q. Will you please proceed to read that written statement?

A. "This report sets forth the annual and accrued depreciation of the Gas Plant accounts of Colorado-Wyoming Gas Company for the years 1926 to 1939, inclusive. By account classification it shows annual accruals of depreciation based on service life estimates furnished by the Bureau of Engineering of the Federal Power Commission and also cost of property retired, salvage on retirements, and other credits, as adjusted by this and another Examiner.

"A comparison of reserve for depreciation of gas plant in service per books and that reserve as adjusted by the Examiner is as follows:"

Mr. Lange: Mr. Examiner, may that table be copied?

The Trial Examiner: Yes.

(At the direction of the Trial Examiner, the following table was copied into the record:)

"Components of Reserve for Depreciation
1926-1939

	As Adjusted by Examiner (Schedule No. 1, Column 3)	Per Books (Schedule No. 4)	Difference
Provision for Depreciation Charged to Expense	$423,617.24	$519,719.50	$ 96,102.26
Retirements			
Original Cost Retired	(37,477.38)	(40,853.22)	(3,375.84)
Salvage	7,523.39	7,539.39	16.00
Balance in the Reserve December 31, 1939	$393,663.25	$486,405.67	$ 92,742.42"

The Witness: "It will be noted that the great difference between the balance shown on the books as of December 31, 1939 ($486,405.67), and the accrued depreciation as of that date as *as* computed by the Examiner ($393,663.25) consists chiefly of the variation in the provision for depreciation charged on the books and the amount of the provision as computed by the Examiner, based on the service life estimates of the Bureau of Engineering."

By Mr. Lange:

Q. Right at that point, Mr. Smith, the service life estimate to which you refer are those heretofore set forth in the Exhibit No. 200 presented by Mr. Copp in this proceeding?

A. That is correct.

"The Examiner's adjustments of depreciation and accrued depreciation were effected through the medium of twelve journal entries, three of which, Entries Nos. 400, 401 and 402, were made by this Examiner, and nine of which were made by another Examiner. The entries made by this Examiner are contained in this report and the entries by the other Examiner in a report entitled 'Gas Plant Accounts and Examiner's Adjustments'."

Mr. McCreery: May I make this inquiry right here: This other Examiner referred to, I take it is Mr. Vaught?

The Witness: That is correct.

By Mr. Lange:

Q. And that is Exhibit No. 199?

A. That is correct.

"The chief function of the entries is the adjustment of the annual provisions for depreciation and, concurrently, so that it will properly reflect the depreciation legitimately accrued on Gas Plant, the Reserve for Depreciation. Those adjustments are necessary because the depreciation expense accounts and the reserve for depreciation are not stated on the company's books upon a consistent basis. The company used various annual rates and in two years, 1931 and 1932, made annual depreciation expense provisions pursuant to instructions received from Henry L. Doherty & Company, unaccompanied by any information as to rates or depreciable base used in developing the amount of the provisions. Moreover, effective January 1, 1937, the company arbitrarily reduced its annual provision for depreciation to $28,000 a year because it considered the reserve to be relatively large. In place of the company's provisions, the Examiner has substituted provisions developed by applying to the amounts in the gas plant accounts as adjusted depreciation rates based on service life estimates of the company's property furnished by the Commission's Bureau of Engineering."

Q. That again refers to Exhibit 200, as testified to by Mr. Copp in this proceeding?

A. That is correct.

"Entry No. 400 reverses the company's annual provisions for depreciation; Entry No. 402 sets up annual provisions for the years 1926 to 1939 based on the Bureau of Engineering's service life estimates and the gas plant accounts as adjusted; Entry No. 401 removes from the reserve the loss on the sale of land erroneously charged to it.

"Depreciation was computed for purposes of adjustments on the adjusted balances in each plant account. In a majority of instances the appropriate annual depreciation rate was applied to the adjusted plant account balance at the

beginning of the year. If a substantial item of plant was added during the year, depreciation, as a rule, was computed on that item in the year acquired for the actual number of months in service. All minor plant additions and retirements were, for the purpose of this study, ignored for the year in which they occurred. They were, of course, taken into account in succeeding years.

"Following the adjusting entries, on Page 4, appears Schedule No. 1. This tabulation contains for each major functional group of plant accounts the annual accruals of depreciation based on the service life estimates furnished by the Bureau of Engineering and the cost of property retired, salvage on retirements, and other credits, as adjusted. It shows gas plant in service divided into five classifications, i. e., Intangible Plant, Transmission Plant, Distribution Plant, General Plant, and Other. It also shows Gas Plant Held for Future Use.

"Two of the five classifications of gas plant in service shown in Schedule No. 1 are supported by schedules which give information of the kind shown on Schedule No. 1, by subclassification. Schedules Nos. 2 and 3 show five and four subclassifications of transmission plant and general plant, respectively. In turn, Schedule No. 2 is supported by Schedules Nos. 2-A and 2-B which classify main line into four sections and laterals into twenty lines, respectively.

"The information given on the first five lines of Schedules Nos. 1, 2 and 3, and their subschedules, is explainable as follows:

"Line No. 1, Original Charges per Books, represents the cost of the company's initial construction plus all additions. In most instances, the amounts on Line No. 1 may be arrived at by adding to the balance per books as at December 31, 1939, all retirements from the inception of the company to December 31, 1939.

"Line No. 2, Examiner's Adjustments, represents the net adjustments to the plant accounts made by the Examiner who prepared the report entitled 'Gas Plant Accounts and Examiner's Adjustments'."

Q. That again is Exhibit 199?

A. Yes, Mr. Vaught's exhibit.

"Line No. 3 is the sum of Lines Nos. 1 and 2 and represents the adjusted total cost subject to depreciation.

"Line No. 4 represents total retirements from the inception of the company to December 31, 1939, as adjusted.

"Line No. 5 is the difference between Lines Nos. 3 and 4 and represents the adjusted balance in the plant accounts as at December 31, 1939. The amounts on Line No. 5 agree with the adjusted totals exclusive of 'Gas Plant Adjustments' shown in Column 5 of Schedule No. 1 of the report entitled 'Gas Plant Accounts and Examiner's Adjustments'."

Q. Exhibit 199?

A. Exhibit 199.

"The depreciation rates used in the computations which appear in Schedules Nos. 1, 2 and 3, are based in general on service life estimates furnished by the Bureau of Engineering, but there are exceptions; depreciation provisions for certain major items of property that have been retired have been computed by the Examiner at rates high enough to cover the depreciation realized upon those items through their removal from service.

"The computation of depreciation on garage equipment, which is included in Schedule No. 3, was handled in a slightly but not essentially different manner than other depreciation computations. The total cost of the autos and trucks purchased in any one year was considered as a group cost, and after that group cost had been fully depreciated, which was usually about five years after the year of purchase, no more depreciation was accrued on that group.

"It will be noted that there were no charges to the reserve for depreciation for costs of removal. The company consistently charged these costs, which have been insignificant, to Expense. No adjustment for them has been made by the Examiner.

"Schedule No. 4 is an analysis of the Reserve for Depreciation for Gas Plant in Service, per books, for the period begun with the inception of the company in 1925, and ended December 31, 1939, and shows the debits and credits to the reserve classified by years in the manner set forth in the tabulation shown in this text, above.

"Schedule No. 5 is an analysis of the reserve for depreciation for gas plant in service, as adjusted, for the period begun at the inception of the company in 1925, and ended December 31, 1939, and is given by years. Its classifications are the same as the major classifications that appear in Schedule No. 1. The minor difference in the amounts as classified in this schedule and as classified in Schedule No. 1 and in the tabulation in the text, above, which is $118.35, is an amount transferred to Gas Plant Held For Future Use."

I think I will correct that to read: * * * transferred to Reserve for Depreciation for Gas Plant Held for Future Use."

Mr. McCreery: What words did you add there?

The Witness: After the words "transferred to," let's add in there "Reserve for Depreciation for."

The Trial Examiner: "Reserve for depreciation for"?

The Witness: Yes, I think that will make it a little clearer.

"Schedule No. 6 gives the net retirements of plant costs charged to reserve for depreciation, per books, and as adjusted, and provides a recapitulation of the Examiner's reclassification and adjusting entries affecting net retirements. It shows the amount of net retirements by years and supports Line 22 of Schedule No. 1. It provides a reconciliation between Column 4 of Schedule No. 4 and of Schedule No. 5, respectively.

"Schedule No. 7 sets forth salvage on plant retired, as adjusted, by years and by accounts; it supports Line 23 of Schedule No. 1. It provides a reconciliation between Column 5 of Schedule No. 4 and of Schedule No. 5, respectively.

By Mr. Lange:

Q. Mr. Smith, is there any other information or explanation that you desire to make in connection with this exhibit?

A. I don't believe we referred to the fact that the exhibit has been approved—

Q. Yes, on the title page bears the approval of Mr. Harold Tomlin, Examiner in charge of regional office, and

W. E. Baker, Chief Accountant, both of those men being connected with the Federal Power Commission in the capacities as stated on that title page.

A. Yes, sir.

Mr. Lange: I believe that is all for the present.

Cross Examination.

By Mr. McCreery:

Q. Mr. Smith, referring to Page 4 of the document marked "Exhibit 201," you state: "Depreciation, computed annually, based on service life estimates furnished by Bureau of Engineering."

At that point, as in your statement, do you there refer to Exhibit No. 200?

A. Yes, sir.

Q. All right, Mr. Copp's Exhibit No. 200.

A. That is correct.

Q. That is what you mean by that reference?

A. Yes, sir.

Q. Similarly on Page 6 where you again state: "Depreciation, computed annually, based on service life estimates furnished by Bureau of Engineering," your reference there to "furnished by Bureau of Engineering," relates to Exhibit 200 again, does it?

A. That is correct.

Q. Now, as I understand your statement in this exhibit, this is purely an accountant's computation aside from the plant adjustments. You have acted purely on the information furnished you through that Exhibit 200 on the subject of depreciation, annual and accrued?

A. There is one slight qualification to that which is covered on the top of Page 5, the latter part of that paragraph of my written statement.

Q. Yes, subject to that which refers to certain minor exceptions, there referred to?

A. Yes, sir.

Q. You have proceeded throughout on the basis of the depreciation study contained in Exhibit 200?

A. Well, what we have done is to take those service lives and apply them to the adjusted plant account on a straight line depreciation basis.

Q. You have taken the depreciation study of service lives and not only applied it to annual retirement, but you have also as a matter of accounting, prorated it year to year and applied it as accrued depreciation, is that true, from an accounting point of view?

A. Yes, sir. The annual provisions charged to expense are entirely consistent with the computation of the reserve balance.

Q. From an accounting and mathematical point of view?

A. What I was trying to think of, I don't see why they wouldn't be consistent from any point of view.

Q. I am not trying to limit you, but the first consistency we are talking about is that they are consistent from a mathematical and accounting point of view. I am not trying now to exclude anything else from your mind. We will come to that a little later, but that is the first approach of accounting, is it not, in this kind of a compilation?

A. Yes, sir. The annual expense and the reserve balance are the results of the same computation. We might put it that way.

Q. That is right. You have yourself in preparing this exhibit, you have not undertaken to enter into the question of actual accrued or any other type of depreciation as a physical problem, have you?

A. I don't understand what you mean by that.

Q. Have you undertaken in this exhibit to deal with the problem of depreciation as a problem of depreciation, not as a matter of accounting entries?

A. Yes, I have dealt with the problem of depreciation.

Q. Yes, all right. Now, so you have dealt directly with that and passed upon that yourself?

A. Well, perhaps from an accountant's point of view I have certainly dealt with the problem of depreciation, I hope.

Q. Based on the figures presented to you by the Bureau in Exhibit 200?

A. I have used their service life estimates.

Q. Yes, now, where did you proceed from there?

A. Based upon their service life estimates we computed straight line percentages for the annual provision and applied that to the original cost of plant.

Q. Which is purely a matter of computation?

A. Well, I wouldn't say it was purely a matter of computation. It is a matter of computation and it is a very

significant factor in stating properly the expenses of a company.

Q. I appreciate that. You took the figures that they gave you with the service lives they gave you and simply spread those out over the period, equally from year to year, did you not?

A. That describes the way in which the service life estimates were applied on a straight line basis.

Q. Your application of them, that's what you did?

A. Yes.

Q. Now, did you make any other determinations in that process?

A. Well, the reserve that we arrived at is automatically the expired service value.

Q. Did you embark at all on the field of engineering in this, or limit yourself strictly to the functions of an accountant?

A. I limited myself to the functions of an accountant.

Q. Now, you said there was some—you pointed out to me that there were certain special retirements there, and where do those appear, Mr. Smith? Is that on Schedule 6?

A. Well, they find their way into the computations on Schedule No. 2, Page 5, Column 6, which relates to compressing stations.

Q. Yes.

A. And, of course, they will be reflected in any other figures that Schedule No. 2 ties in with.

Q. Yes, that's right. What I would like to have you do is to explain that picture as you adjusted it in connection with this particular item, and for the information of the record.

A. Well, the service life estimates of the Bureau of Engineering in Exhibit 200 were related to the property in service, December 31, 1939. I think that was made clear in Mr. Copp's exhibit and testimony.

Q. Yes, that's right.

A. It was found that in analyzing the company's experience as to retirement and loss of service value in regard to the Wellington compressor station, due to the fact of certain changes and transfers and movement of equipment and other factors, that certain retirements had been made prior to 1939 which we felt should be taken care of.

Q. May I interpolate a question right there? Were

those retirements reflected in Exhibit 199 in connection with the entries with respect to the transfer of equipment from Wellington to Arvada?

A. They are reflected there, and in Exhibit 199 they relate to certain of those entries that you have not yet cross examined about, and another reflection of the same thing that I am talking about is on Page 5, Schedule 2, of Exhibit 201, Line 22.

Under Column 6 there it shows that there have been in excess of $24,000 retired from compressing station, original cost, and the net retirement on Line 24 of that same page, same column, is reflected there as $20,944.60. Now, those figures include the specific items that I am talking about which were taken care of, or in other words, a reserve was provided over the period that these retired units were actually in service and that was necessary in order that the reserve balance at the end of 1939 would be a proper balance because—

Q. In other words, to give you a proper book balance in that account?

A. Yes, and it was necessary in order to state the expense for the years 1939 and prior years, and it was also necessary in order to make proper use of Mr. Copp's service life estimates which were confined to the property in service on December 31, 1939.

Q. And you are now applying, as I understand it, those service lives as you compute them to property retired actually and on the company's books prior to that time, is that true?

A. No. That is where I make the exception. Instead of applying those service lives to these retirements which we thought were unusual, more or less out of the ordinary, instead of applying Mr. Copp's service life to those, we have taken the actual life of those units of property and written their cost off over their actual lives, all prior to 1939.

Q. Those lives in all cases, I take it, were shorter than the service lives set up in Mr. Copp's table, were they?

A. Oh, yes, considerably.

Q. Now, is the detail of those items set forth on Page 5 in Column 6 of Schedule 2? Are those set forth in Schedule 6 on Page 11?

Mr. Lange: Still referring to Exhibit 201?

Mr. McCreery: Referring still to Exhibit 201.

The Witness: Yes, sir. I believe we can relate those items, or at least most of them, to items that appear in Schedule No. 6, Page 11.

By Mr. McCreery:

Q. As I understand, and may I have this information, Schedule 6, at Page 11, includes also other items as well, does it not?

A. It includes—

Q. Additional items.

A. It includes all the retirements that have been made.

Q. That's right, in addition to the particular 24,000-odd hundred dollars referred to by you at Page 5, Line 22 of Schedule 2?

A. That is correct. There is a tying in figure for that $24,427.45, a cross-reference figure on Page 11, Line 14.

Q. Yes, and the total opposite "Compressing Stations" on Line 14 is the same figure.

The total all across that line produces the first figure, 24,000 some odd hundred dollars?

A. Yes, sir. Now, the specific items I was talking about comprise only a part, but the major part of the $24,000, and I think we can identify those up above—

Q. All right.

A. One of them—take Column 10 on Line 5, Page 11, that $14,205.97, that is a part of this exceptional treatment that I mention.

Q. That's Line 5, $14,205.97?

A. Yes, that enters into the—

Q. And what does that item consist of?

A. Well, in a general way that is installation charges and certain items of equipment which were lost when a considerable portion of the Wellington station—Wellington compressing station—or, rather, I should say the equipment in the Wellington compressing station, was moved to the Arvada compressing station in 1931. This particular part of the Wellington station was built in 1927, and then in 1931, several large units of equipment were removed to Arvada, and there was a certain amount of retirement loss

for installation charges and non-recoverable items that were simply lost in that transfer, and that is substantially what the item of some $14,000 represents. We have charged that off and provided for it over the years 1928, 1929, 1930 and 1931.

Q. Well, now, let me ask this question, Mr. Smith, to be sure that I fully understand your procedure:

Supposing that in the year 1930 Mr. Copp had made his study as to service life, and we will presume that having made that study at that time he would have found the same service lives that he now has set forth in his Exhibit No. 200; having found that, then thereafter in 1931, and this service life being what he describes as a composite service life of various types and groups of property, some of which he said would last longer, some which he said wouldn't last as long, and some which he said might hit the average according to my understanding of what he means by composite service life—having made that determination in 1930, we'll say, and proceeding similarly, and then in 1931 when the transfer is made of this equipment and these intangibles, as far as the installation as you state usually are lost, but they have to be duplicated again in the reinstallation to some extent, what would be done with that item of $14,000, then, having already set up a 50-year service life for these items of property? Would there be a special depreciation charge made or would it go into what you call the annual charge for the period divided by the number of years? You have made a special depreciation charge against the plant here. Now, under those circumstances would you have made that charge?

A. You mean to confine the charge to one year now, in 1931?

Q. Well, it happened this particular circumstance accrued in the next year—I don't care when it accrued, provided it was after these assumed determinations had been made. We will assume that the determination of service life had been put in full force and effect so that thereafter in 1931 by virtue of what occurred involving this $14,000 item, which you may call an unusual situation; being, of course, the revamping of the whole plant by which the former main plant and only plant became the tail to the dog, what would your treatment have been of that in 1931?

A. You are assuming, of course, that this circumstance that did occur in 1931 was not reasonably predictable in 1930 and therefore was given absolutely no consideration in the setting of the service life estimate?

Q. Well, I gathered from the testimony of Mr. Copp that he has tried to give some consideration with varying degrees of emphasis on practically every item he could think of, whether it was real or speculative.

A. You can't—

Q. You can't do that?

A. I think perhaps he has confined himself to things that are predictable or reasonably predictable.

Q. He said he gave slight consideration to washouts. You can't predict a washout. He said there was only one but he didn't think it was of much importance but it was one of the elements in his judgment figure and that is what he arrives at. That is not predictable, Mr. Smith.

A. Perhaps rather than get into a discussion of what Mr. Copp—

Q. Please don't misunderstand me. I didn't mean that. However, I don't want you to evade the question, either, at that point. What would you do in that kind of a situation?

A. I think, of course, the first consideration is what the service life estimate had contemplated with respect to that very thing.

Q. I presume the purpose of a service life estimate is to take into account all possible contingencies. No one can predict the present situation in the future, unfortunately, so the elements that enter into that are all of the elements that might occur. He is trying to set up, as I understand it, a safe situation of some kind.

When you predict a service life, these elements come in so we will assume with all of the foresight that it is possible for your engineering department to utilize it made a service life estimate in 1930 or 1929, or in any year prior to this particular year, and at that time the necessity of constructing a new line because of depletion of gas supply had not arisen. I will say that there is no question of depletion of gas supply in anybody's mind now. The matter has been considered and Mr. Copp said "I considered that matter and put it out of the picture," so at this time they consider the gas supply and rightly or wrongly put it out of the

picture. This thing arises after that time. What would be the procedure and what would you do under these circumstances?

A. I think I can answer your question if I can make one or two assumptions to see if they satisfy you.

Q. All right.

A. It has always been my understanding of a service life estimate that the engineer confined himself to the reasonably predictable; he didn't try to forecast the unpredictable, and that in any event in property of this kind he would give consideration to the supply of gas, either actual or potential, according to the circumstances, so if we can assume that this kind of a loss was an extraordinary loss that hadn't been contemplated in a service life estimate and was unusual, which I think this one is because of the short period of time involved, there is a provision in the Commission's Uniform System of Accounts for taking care of just such a situation.

Q. But this procedure, Mr. Smith, was followed prior to the passage of this act and prior to the promulgation of this Uniform System of Accounts, and neither the Department nor the Company at the time I suggested this thing might have occurred would have had the benefit of this Uniform System of Accounts, so we can't with our hindsight, which is always good, go back. We have to take it on some other view and it seems to me—go ahead with what you have to say.

A. I can state specifically with reference to your comment there that the Uniform System of Accounts reflect good accounting in this particular instance, I think, regardless of whether it was in force then or not.

Q. Isn't this a fact, too, Mr. Smith, that there could have been substantially different provisions in many parts of the accounts which would equally reflect good accounting but wouldn't reflect the kind of accounting that the Federal Power Commission wanted? It isn't the difference between good and bad accounting; it is the accounting they want, isn't it? This Uniform System of Accounts doesn't represent the bible of good accounting. There is a difference of opinion as to what should be and what shouldn't be. This is the view of the Federal Power Commission as promulgated in 1940, isn't it?

A. It is by far the best system of accounts ever set up for utility companies.

Q. I am not questioning you about that, but I say this: It doesn't represent the only system of accounting, does it?

A. The Uniform System of Accounts is the best system that has been heretofore adopted and it has been adopted by the NARUC.

Q. We didn't have the benefit of that, but you go ahead and say what you were about to say.

A. On Page 23 there is an account for extraordinary property losses. The use of that account as I understand it is when a company is faced with an unusual retirement loss that isn't provided for in its reserve for depreciation it may apply to the Commission to use this account, No. 141 which is a deferred debit account and then the amortization of that loss may be handled in a manner that is satisfactory to and approved by the Commission.

Q. Understand I am not making issue with this Uniform System of Accounts but I am undertaking to state that this appears to be and is in its nature a prospective operation. There have been numerous other systems of accounts that have been approved by the National Association of Railroad and Utility Commissioners and other bodies, so this isn't and hasn't a retroactive effect, has it? Do you understand it has?

A. So far as expense accounts are concerned, my understanding—I have reference to income and expense accounts—is that the natural gas companies started off in January 1940 with this Uniform System of Accounts. So far as plant accounts are concerned, it is in effect retroactive because it provides for making certain reclassifications and setting out certain significant items effective to the time that the property was first devoted to public service, regardless of who owned it.

Q. I appreciate that. Now let's get back to the question. What would be your answer to my question?

A. My answer is that any unusual property loss which is not provided for in the reserve for depreciation may be segregated and with the Commission's permission handled through Account 141, extraordinary property losses, appearing on Page 23 of the Uniform System of Accounts and that

that amount might be subject to some sort of an amortization upon the approval of the Commission.

Q. That particular section is a prospective operation, isn't it?

A. If you were confronted with this situation today, I believe you would—

Q. That is today. This situation confronted the company in 1931. Is that provision applicable to that situation in 1931?

A. The Uniform System of Accounts wasn't binding upon the company at that time.

Q. Not only was it not binding, but it was not in existence then.

A. It did not exist at that time. So far as the accounting principle involved is concerned, the accounting principle would have been applied and could have been very good accounting. Using an established fact, actual expense, I think these charges to income were expense for the years the property was in service. The company, if it had been confronted with this loss in 1931, might have accrued a little reserve more in the future to take care of it and that in my opinion would have been good accounting.

Q. Notwithstanding the prior determination of the service life that had been put in the annual charges?

A. I am assuming this is an extraordinary property loss.

Q. I am just trying to get your viewpoint on it. I am not trying to take issue.

A. I am assuming this is a loss which wasn't contemplated, the type of retirement that wasn't contemplated in the service life estimate—

Q. Perhaps it was contemplated but they were in error in the contemplation on the life of the field which is a possibility. In other words, in contemplating the life of a gas reserve it may be you are either too long or too short, so they may have contemplated it but may have been in gross error as to the final judgment arrived at and that would leave it in the situation where you would say that it would require and justify an extra treatment and a special retirement set up for the time?

A. Yes, that would be a question of fact. If the facts justified that, I think your accounting would be very simple.

Q. I am trying to get just what your view would be. So

even if you had set up your Uniform System of Accounts in 1930 or in any year prior to that time, and if this situation had arisen then, a departure from your annual retirement plan would have been entirely appropriate to meet that situation?

A. If the facts justified it being considered as an extraordinary property loss, that is correct; if it wasn't contemplated in your service life estimate and thereby in your annual provision, it wouldn't be proper to charge it against depreciation reserve. It should then be handled as a separate extraordinary property loss. As I see it, it is primarily a question of fact, not accounting treatment.

Q. There is no question in your mind but the fact that a fully developed system serving Fort Collins and Cheyenne from the Wellington field where the gas supply very rapidly became depleted, which involved the entire loss of that system or the construction of a very much larger system for which this would be the tail, was such a situation as that regarded as an extraordinary situation?

A. Well, certainly as related to the service life estimates that have been set up because the service life estimates made by Mr. Copp related only to the property which was in service at December 31, 1939.

Q. He has made of course, a composite estimate of all the property?

A. That doesn't make any difference.

Q. Some of which may last a very short time or become obsolete, or others may last a long time. He hasn't attached service lives to units of property if he has given a composite picture which is to cover the short and long time duration, as I understand it.

A. Yes, but he has confined his calculation to the property actually in service at the end of 1939, and so far as his calculations were concerned, these extraordinary retirements are out of the picture.

Q. He has applied it to the company's property since the beginning, or since 1939, hasn't he?

A. As of 1939, as I understand it.

Q. And certain parts of that property are to have a 50-year life?

A. That is my understanding.

Q. This situation that required the change from Wellington to Arvada was a very extraordinary situation in your judgment as a mater of fact?

A. It was an extraordinary property loss in view of the service life estimates which we are applying in this exhibit.

Q. But independent of any service life, you have to deal with it as a plain matter of fact, don't you?

A. That is what I said a while ago, the facts in a particular case would govern. As related to another set of service lives which contemplated this sort of thing and provided for it in effect, it might not be an extraordinary loss.

Q. In any event, this transfer of property, irrespective of service lives or anything else, is an extraordinary situation in the ordinary life of the company, isn't it?

A. You are branching out in a big generality now, aren't you?

Q. No. I want to get away from theory and get into facts. You said it was a question of fact, so I wanted your conclusion. Factually it would be an extraordinary situation in the life of this or any other company where that situation would arise?

A. Well, of course, I was referring to it as an extraordinary property loss, but in the light of the service estimates we have applied it here. As to going a step farther and reaching a generalization about it, I don't know of my own knowledge what the company thought the reserves of the Wellington field were when they started out in the business and whether or not the depletion of the Wellington field was an unusual circumstance or not. I think it would depend a great deal upon the company's expectation.

Q. If you didn't know that, Mr. Smith, how did you know it wouldn't be a normal picture of service life?

A. By the extraordinary property loss as related and determined by the service life estimates which have been set up and which are being used.

Q. But you said it would be determined by whether or not this extraordinary occurrence was contemplated in making up the service life. As I understand it, all normal developments are supposed to be included in the computation of service life, is that true?

A. Those that are reasonably predictable.

Q. Then to say it isn't in your service life, you have to first arrive at the conclusion it is an extraordinary situation, do you not?

A. If the situation develops, and it hasn't been included in the service life estimates, it is, of course, an extraordinary property loss, but I still don't think you see my point. I don't know whether the company—

Q. It doesn't make any difference what the company thought. You were determining this matter in the entry you were making. I am trying to find out what you determined, not necessarily that it might be right or wrong, but I am trying to get what your state of mind was.

A. The reason I have made the entries as I have made them is very simple. The service life estimates which were given to me did not contemplate or have anything to do with the property that was retired years ago and had gone out of service. It was related to the property in 1939 and it was an accomplished fact to work upon.

We knew the amount of expenditure that was lost. We knew it was in service over a certain time. We have a certain set of facts to make an accounting calculation and that is exactly what I have done. I have made the best computation under those circumstances, or possibly, under any circumstances.

Q. With respect to this property, not only this very extraordinary loss but all of the property prior to 1939 that had been retired, you do not apply the service life defined by Mr. Copp but you apply in every case the service life to that particular property as it is based upon its particular life?

A. I don't understand the question.

Mr. McCreery: Read the question, please.

(The question referred to was read by the reporter as set forth above.)

The Witness: If I understand your question, I think the answer is no. I will go ahead and explain it.

By Mr. McCreery:

Q. All right.

A. The only instances in which we have treated the items

as extraordinary loss have had to do with the retirements from the Wellington station which were related possibly to the transfer of equipment in 1931 and some other small retirements up there. There are other retirements which have occurred prior to December 31, 1939 which we have charged against the reserve as a normal retirement charge. In other words, we in effect charged them against the service life estimate furnished by Mr. Copp. It wouldn't be a correct statement to say we have provided for all of the retirements outside of the reserves provided through Mr. Copp's estimate of service lives.

We have charged some retirements against that, but not anything that we considered an extraordinary retirement loss.

Q. Were they retired on the service life basis built for that particular type of property in Mr. Copp's exhibit?

A. I believe so. I recall one instance—

Q. Why wouldn't they, therefore, be taken care of in your general annual retirement schedule as you have set it up beginning way back in the early years?

A. I don't think I understand that previous question.

Mr. McCreery: I will ask it again, Mr. Smith.

The Trial Examiner: Mr. McCreery, before you ask the question, let us take a five-minute recess.

Mr. McCreery: All right.

The Trial Examiner: We will stand in recess for five minutes.

(At this point a short recess was taken, after which proceedings were resumed as follows:)

The Trial Examiner: The hearing will be in order.

By Mr. McCreery:

Q. Mr. Smith, referring to Schedule 6, Page 11, Exhibit 201, you have tabulated in Lines 13, 14, and 15, the various retirements of property classifications made during the years 1929-1939; that is true?

A. Yes, sir, and also Line 16.

Q. Lines 13, 14, 15, and 16. Didn't I say 16?

A. I don't think you did.

Q. It should have been included.

You are dealing here with a composite life of all the types of property that the company possesses in groups according to Mr. Copp's exhibit in which he assigns the various groups certain service lives. Items of property within each of these classifications were retired during the years 1929 to 1939. Were they retired actually by virtue of your entries here at an accelerated rate faster than the rate in the composite life conclusions arrived at by Mr. Copp?

A. You are confining that question to the retirements exclusive of the extraordinary items?

Q. I will leave that out for the present.

A. You will leave out the extraordinary items we have discussed?

Q. Yes. Answer the question with that assumption.

A. That would apply as far as Line 13 is concerned and a small portion of Line 14, and possibly a part of Line 16. Retirements were made before the property had been in service the number of years contemplated in Mr. Copp's composite service life estimate. It doesn't apply to Line 15 which is transportation equipment for this reason—

Q. Let's leave Line 15 out. It doesn't apply to certain of the items in Lines 13, 14, 15, and 16, in that certain of those items there were in fact given—not any of them were extraordinary items of retirement—a service life less than that set up for that class of property by Mr. Copp by reason of your entries here made?

A. I wouldn't say that they were given a service life less. We simply charged them against the provision, the reserve provided by the application of Mr. Copp's service lives for the reason we have considered them to be normal retirements. Some of them, of course, were replaced with the same kind of equipment and they were normal retirements which are expected to occur even in the early years of the life of the property and have been given consideration by Mr. Copp. I think he did consider the retirement experience of this company in setting his composite life, so this type of retirement which is not the extraordinary retirement we talked about early this morning, this so-called normal retirement charge, those have been weighted

in and considered by Mr. Copp according to my understanding of his exhibit, and I believe that is borne out in the testimony which he gave.

Q. That being true, I will ask this question, the question whether they have in effect been given in your computation of the property account of this company a shorter life than the composite life which would be applicable to them under Mr. Copp's exhibit?

A. I am not sure I understand what you mean.

Mr. McCreery: Read the question.

(The question referred to was read by the reporter, as set forth above.)

The Witness: You see I haven't given anything a service life in my computation. In effect what I have done is to make annual accruals for depreciation and then charge property retirements against that reserve, so I haven't given any life to anything. That is the reason the question wasn't clear to me.

I might state the situation in another way and that may answer what you have in mind: The record of the company to date does show it has had some retirements of equipment at the end of the period of service which is less than a composite service life assigned to that particular type of property by Mr. Copp. That is a fact. The record shows that. They have been very small in amount to date.

Q. What is the purpose, then, of these entries here detailed in Lines 13, 14, 15, and 16, aside from the extraordinary loss put in a separate place for the time being? Isn't the effect of it to produce an additional charge against the plant under Schedule 2, Page 5, in the amount of $20,944.60?

A. What line are you referring to?

Q. Line 24, Column 6.

A. You are now speaking of compressor stations?

Q. I am speaking of that particular item, Mr. Smith, which is shown in Line 14, Page 11, Schedule 6, which includes both extraordinary and non-extraordinary losses and retirements. Haven't you treated them both alike? Also in Line 24 you—I won't ask that question yet.

A. You asked the question whether I had treated them both alike?

Q. Yes.

A. Of course, my answer to that would have to be in the light of my previous testimony is that they haven't been treated alike because the extraordinary items have been provided for through accruals to the reserves separately and those that are not extraordinary have been charged against the accruals provided by the application of Mr. Copp's service life estimates.

Q. Well, now, in your item of $20,000, which starts with your item of $24,427.45, which $24,000 item includes both the ordinary and extraordinary retirements, you have in entering the charge on Line 24 made a net charge there against reserves in those items, both normal and extraordinary. Haven't you in effect treated them identically in building up your depreciation or reserve charge?

A. You are referring now to Page 5, Schedule 2?

Q. That is right.

A. As far as an accounting treatment is concerned, in charging them against the reserves, the retirement out of the plant on the one hand and making the charge against the depreciation reserve, the accounting treatment has been identical. Of course, they are all brought in here together because all of the retirements are handled through this one set of figures, whether they were extraordinary or normal retirements, but of course that doesn't tell the whole story.

Q. You tell the rest of the story so I may have it clear.

A. The rest of the story—I might refer to Page 5, Column 6, Schedule 2—is the accruals to expense, particularly on Lines 9, 10, 11—

Q. Accruals, that is your annual provision?

A. Yes, those items shown up there above—

Q. In what line?

A. Line 9—is for the year 1928 and Line 10 is for the year 1929; Line 11 is for the year 1930 and so on.

Q. Of course, Line 9 wouldn't be involved because in your Schedule 6, Page 11, you only go back to the year 1929.

A. You are confused there because even though the retirement wasn't made until 1929, we started accruing for some extraordinary items as early as 1927, and the largest, we started accruing for it in 1928.

Line 9, for 1928, is effective—

Q. But Line 9, 10, and so on, are not the company's figures. They are your application of the figures furnished by Mr. Copp, aren't they?

A. Referring to Column 6, only in part; that is, in addition to the figures supplied by Mr. Copp, we have taken care of the accruals for the extra loss through the same accruals.

Q. Is that in Line 9?

A. That is right.

Q. In other words, do I understand your figure $7,403.54—it being on Line 9, Column 6—in addition to reflecting what you stated at the head of it reflects something else? You say, "depreciation computed annually, based on service life estimates furnished Bureau of Engineering." Isn't that a computation from his figures which you have utilized in this exhibit, that $7,403.54?

A. No, sir, that is one of the figures subject to the qualification stated on Page 5 of my written statement that I referred to a moment ago.

Q. Could you furnish the work sheets for those figures during the noon hour to Mr. Jorgensen?

A. Yes, I will be glad to do that.

Mr. McCreery: If you will do that it may simplify what I am trying to learn, Mr. Examiner.

I had assumed that these figures covered just what I understood they were to include, but it seems there are some adjustments made in them and we would like to find out what they are. As to that part of the inquiry, if the working papers can be gone over with Mr. Jorgensen during the noon hour, I think we will save time. I may or may not have any further inquiry with respect to that.

Mr. Lange: They will be made available to you during the noon hour, Mr. McCreery.

Mr. McCreery: Thank you.

Q. Barring those special items, Mr. Smith, you have aside from that simply applied the figures that Mr. Copp has furnished you?

A. We have made our computations based on his service life estimate; if that is what you mean.

Q. That is what I mean. You have made that from year

to year at the same rate? You simply divided the service life into the number of years in that service life as applied to each group of property and applied that year after year on that basis, based upon the then capital account in that part of the company's property?

A. Yes. Putting it another way: We translated, for instance, a 50-year life on the transmission line to a straight line at 2 per cent per year and applied that 2 per cent per year to the original cost of the main transmission line as a group year by year.

Q. Simply as a matter of accounting practice?

A. Well, I don't think it can be dismissed quite that easily. We have done it from an accounting point of view and we have had definite objectives in doing that.

Q. I have no doubt of that, but I am talking of what you did. I wasn't asking about your objectives. I am saying in fact you did. Whatever your motives are, that is a matter for you to determine, of course.

A. All the work I have done has been strictly accounting work.

Q. That is what I mean. You simply as an accountant applied figures in these tables and in this manner to the figures furnished and the rates and service lives furnished by Mr. Copp?

A. Yes, based upon the service lives furnished by him. The rest of it is strictly accounting. The base is accounting.

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* * * * * *

He testified further, on applicable general accounting principles as follows:

The Witness: "The Commission's Division of Accounts, based upon its examination of the accounts and records of Canadian River Gas Company, Colorado Interstate Gas Company and Colorado-Wyoming Gas Company, respectively, has among other matters, prepared studies showing the original cost of the plant of each of such companies. The original cost studies so prepared conform generally to the principles set forth in the Commission's Uniform System of Accounts for natural gas companies.

"The approach followed in obtaining original cost has

been essentially an accounting approach. That is, the dollars accounted for as plant on the respondents' books have been reclassified or earmarked, as appropriate, or eliminated if the facts developed, as related to sound accounting, so warranted.

"An original cost study which disregards either wholly or in part the accounting results shown on the company's books is acceptable. This is a fundamental maxim in the practical application of the original cost principle. In other words, original cost in order to be valid must be obtained by an accounting method. It must conform to certain coordinated and consistent principles which are inherent in accounting theory and methodology.

"During the past five or six years a significant change has taken place in public utility accounting in the United States through adoption of uniform systems of accounts which embody the original cost principle or doctrine with respect to plant assets. With reference to the electric and gas utilities, such uniform systems of accounts have been sponsored by both the Federal Power Commission and the National Association of Railroad and Utilities Commissioners. Many state commissions have adopted systems of accounts embodying the basic principle of original cost. In fact, it is now estimated that 90 per cent of the electric utility industry, measured either by assets or revenues, is using some system of accounts which embodies the original cost principle.

"The Uniform System of Accounts for natural gas companies prescribed by the Federal Power Commission became effective on January 1, 1940 and reports indicate that the Federal Power Commission system and the system with which it is nearly identical, namely, the one adopted by the National Association of Railroad and Utilities Commissioners, are also rapidly attaining wide acceptance on substantially a national basis.

"It is also significant that the system of accounts prescribed in 1935 for telephone companies by the Federal Communications Commission recognizes the original cost principle. In 1935 the Interstate Commerce Commission prescribed a system of accounts for pipe line companies

which likewise recognizes the same principal although not called by that name. In addition, the system of accounts for water companies recommended by the National Association of Railroad and Utilities Commissioners also requires that the plant accounts be reclassified and kept in accordance with the original cost basis.

"The original cost principle is highly acceptable from the standpoint of accounting theory. The doctrine in itself or its accounting application does not add to or subtract anything from the plant accounts of a utility company; it merely *analyses*, classifies, and segregates amounts which are significant to regulatory bodies, investors, and even to management. It permits achievement of one of the fundamental objectives of good financial reporting through adequate and truthful disclosure of highly pertinent data.

"To understand the historical reasons for the adoption of the original cost principle it is necessary to understand the condition of utility accounts in general at the time the systems of accounts were under compilation some six or seven years ago. Many public utility accounts were in very bad shape. The tremendous amount of inflation disclosed by the Federal Trade Commission in its investigation of public utility companies is a matter of public record and common information to the industry.

"Regulatory bodies recognized as a result of that study that some sort of action was necessary or at least desirable to correct the abuses which had been disclosed. I know personally of many cases in which the property accounts were almost meaningless because of large unidentified amounts resting in lump sum accounts. I know of cases in which the investment in the various utility departments, such as electric, gas, street railway, and so forth, was not known by the management and of course, under such circumstances the cost of a particular generating station or transmission line was hopelessly concealed or buried. It was general knowledge among public utility accountants that retirements of property had been made by the utility companies without proper record, and that in many cases retirements were recorded at estimated original cost of

construction although the amount carried on the books for that property might have been much greater.

"One of the principal abuses in earlier utility accounting was in connection with acquisition of going concerns; that is, mergers, consolidations, and other property acquisitions. It was probably for this reason that the systems of accounts which have been recently adopted apply the original cost doctrine technically to the acquisition of operating units or systems. The original cost system furnishes a remedy that goes to the source of the evil because it provides that the cost to the person first devoting operating units or utility systems to public service shall be recorded in the detail plant accounts, and that any difference between such costs and the costs to the present owner shall be earmarked in specific accounts. In other words, the new systems, so far as the plant accounts are concerned, require first and fundamentally the reclassification or breaking up of the amounts appearing on the books.

"The original cost systems of accounts yield other benefits. Original cost is an element to be considered in the computation of the base rate, and the only manner in which original cost can properly be ascertained is by an accounting process. The condition of the records of many utility companies a few years ago did not permit this ascertainment within a reasonable time with a reasonable amount of effort and cost.

"Also of importance is that after the necessary information is available, through application of the original cost principle, proper regulatory steps can be taken to obtain sounder financial structures for a great many public utility companies. As soon as investors are assured of the absence, or at least the disclosure, of inflation in public utility capital accounts, money should be attracted to the industry more easily and at a lower cost. The original cost scheme is the only scheme in my opinion which can accomplish these objectives.

"The systems of accounts prescribed by the Federal Power Commission, as well as those promulgated by the National Association of Railroad and Utilities Commissioners, definitely prohibit the recomputation of the cost of

the company's construction as of the effective date of the system of accounts, when such construction was accounted for in accordance with the system of accounts in effect at the time or in accordance with the discretion of management as exercised under the board principles of accounting.

"Gas Plant Instruction 2-B of the Federal Power Commission system of accounts for gas utilities contains the following definite language:

> "'* * * It is likewise not intended that adjustments shall be made to record in gas plant accounts amounts previously charged to operating expenses in accordance with the uniform system of accounts in effect at the time or in accordance with the discretion of management as exercised under such uniform system of accounts.'

"A similar provision is in the system of accounts for electric utilities and licensees.

"It has been the consistent interpretation of the Federal Power Commission's Bureau of Accounts, Finance and Rates, of which Mr. Chas. W. Smith is the head, that Instruction 2-B prohibits any restatement of plant costs if such costs were in accordance with generally accepted principles of accounting at the time when recorded.

"The National Association of Railroad and Utilities Commissioners has also been emphatic in its interpretation of Instruction 2-B. The following language is used at Pages 9 and 10 with reference thereto in a publication entitled 'Statement Relating to the Original Cost and Reclassification of Utility Plant Pursuant to the Provisions of Uniform Systems of Accounts for Electric, Gas and Water Utilities,' revision of September 20, 1940, prepared by the Committee on Statistics and Accounts of the National Association:

> "Restatement of costs based upon revised allocations of joint expenses (expenses applicable to construction and operations) cannot be permitted. Two self-serving, self-impeachments must be guarded against: "our records are in such bad shape that we cannot determin the cost of our property from our books and records"

and "we have not in the past properly distinguished between construction and operations and construction and maintenance."

"' * * * The intent of the reclassification is to reclassify the dollars in the plant account as of the effective date of the system of accounts to the new accounts. This process is a reclassification and not a reaccounting. The utilities are required under the system of accounts to reclassify the dollars in their plant accounts as of the effective date thereof and not to compute a hypothetical original cost of property constructed by them.'

"The uniform system of accounts promulgated by the Public Service Commission of New York for gas companies is even more rigid than the provisions referred to above of the Federal Power Commission and National Association systems. Gas plant instruction 2-F of the New York system provides as follows:

"'Nothing herein stated shall be taken as permitting the recording as part of the original cost of gas plant of amounts charged in previous years to operating expenses, operating taxes, or other income or surplus accounts.'

"From the foregoing language it is clear that the New York system specifically prohibits the restatement in plant accounts of any item heretofore charged to any part of the income account or to surplus, even if the charge was purely an accounting error.

"The position taken by the Federal Power Commission's accounting division and by the National Association of Railroad and Utilities Commissioners, indicated above, has positive sanction in accounting theory. They seek to prevent what would be the equivalent of writing up plant accounts and certainly the latter is one of the worst abuses in utility accounting.

"To understand completely why the interpretations of the Federal Power Commission's accounting division and the National Association represent sound accounting practice, it is necessary to understand some of the fundamentals pertaining to the basic nature of accounting.

"Accountancy as applied to a business entity, in brief, deals with proprietorship, or the assets represented by proprietorship, and their changing amounts as measured in units of money. Of primary importance in the accounting process is the assigning or allocating of costs to or matching of costs with, revenues. This phase of accounting has been described as 'crucial' from the standpoint of periodic income measurement and admittedly it comprehends most of the difficult problems of accounting analysis. Accounting employs innumerable details in its processes and furnishes vital information to business management and proprietors but its central purpose is cost accounting, that is, determination of the cost of doing business—the cost of obtaining revenues and the resulting profit or loss, or income.

"Contrary to the belief of the uninformed layman, accountancy is not an exact science. Every qualified accountant appreciates how utterly true this statement is. Accounting principles and practices are based to a considerable extent on logic, but its philosophy is also influenced tremendously by convention and tradition.

"Although accountancy is far from being an exact science, it is nevertheless a well-developed science. Its mechanisms are unavoidably very complex for a large business organization. The mechanics of accounting as practiced are far from being uniform.

"As to its broad fundamental principles, however, the science of accounting is about the same everywhere, but even those board fundamental principles are not inflexible in their detailed application. In fact, much choice and discretion are permitted management and accountants within the scope of those broad principles. To illustrate this point, it is fundamental in accounting that inventories of merchandise, supplies, and so forth, when existent, should be included in the balance sheet and proper effect given in the income statement. The method of pricing the inventories, however, is subject to wide variation and to much discretion or choice. Department stores, for example, use a statistical method in pricing their inventories; some businesses use a first-in, first-out method, whereas others

use the last-in, first-out scheme. Some businesses state inventories on the basis of cost or market, whichever is lower, while others use cost, and in some cases where inventory costs cannot be obtained, market value less estimated selling expense is used. The Federal income tax regulations for many years have permitted wide discretion in pricing inventories, but it is significant that no change in method of pricing may be made without obtaining special permission from the Commissioner of Internal Revenue.

"In the extractive industries it has long been accepted accounting practice to charge substantial replacements of plant to expense just the same as in many jurisdictions, and in England it is accepted law for the extractive industries to pay dividends out of capital. In fact, the extractive industries, because of the nature of their undertakings, quite generally charge items to expense which would ordinarily be charged to capital or plant accounts in other business enterprises. There is good reason for this, of course, from the standpoint of business policy, and the practice if followed consistently yields satisfactory and sound accounting results which are generally accepted.

"One of the characteristics of public utilities is their relatively large investment in plant assets. A tremendous amount of accounting, revolves around such assets. Considerable discretion has been allowed in the past and is still allowed the management of a particular utility company in accounting for its investment although obviously the natural tendency of regulation is to restrict the area of managerial choice.

"While considerable variation has existed in individual policies of accounting for plant items, accountants have been equally willing to certify to financial statements of companies which have followed different methods or policies. They have been right in doing so, because the general or accepted principles of accounting do not lay down one and only one inflexible rule. Any practice may be right if it is within the limitations of the broad scope of an accounting principle and is followed consistently.

"The reason for this condition is that accounting, to

repeat and to re-emphasize, is not an exact science. With this, any qualified accountant will agree.

"As to many items which are charged to the accounts, the question is not what treatment is absolutely right or wrong, but rather which is the preferable practice; and the treatment adopted for individual items is not nearly so important as consistency in the treatment of all such and similar items.

"This necessitates a few words relative to the importance of consistency in accounting. When a public accountant certifies to financial statements, he invariably makes a positive affirmative assertion that the statements have been prepared in conformity with generally accepted accounting principles applied on a basis consistently followed. Any departure from consistency requires a qualification in the auditor's certificate. This reference to consistency is contained in the form of certificate approved by the American Institute of Accountants. It is in widespread use, as reference to the annual reports of almost any corporation having listed securities will disclose.

"Consistency is vital to the integrity of financial statements. It is absolutely essential that the accounts which underlie the balance sheet and income statements be kept at all times in accordance with consistently applied principles and practices, for otherwise distortion, manipulation and untruthfulness, consciously or unconsciously, would result.

"One of the more common misconceptions of accounting among the uninformed is that the two principal financial statements, the balance sheet and income statement, are not related. This misunderstanding where present is indeed unfortunate. These two statements are very closely related and this relationship is always present, consciously or unconsciously, in the minds of accountants. In fact, this is fundamental in the science of accounting.

"It is one of the first principles taught to students of accounting and represents something they are never allowed to forget, either during instruction or in practice. A particular charge may be recorded in an account of either

statement but not simultaneously, that is, duplicated, in the accounts of both.

"Charges are frequently made to balance sheet accounts and then subsequently prorated or allocated to income accounts of different periods. This process is going on all the time as one of the essential routines of accounting. It is important that accountants, analysts, and others who use accounts do not forget the relationship of the two statements by focusing attention exclusively on one or the other even momentarily. Such a misconception may result in distortion and serious error.

"The relationship of the vital principle of consistency in accounting to any proposed reaccounting or restatement of items charged to expense in the past is very clear. It means, in my opinion, that costs which were recorded in the past in accordance with accepted principles of accounting at the time may not now be reaccounted for and the election at the earlier date annulled merely because of a change in view or purpose.

"The very nature of business transactions makes it mandatory that consistent accounting principles and practices be followed. As to many expenditures there is no sharp line of demarcation between operating costs and capital costs. It has constantly been recognized by accountants and acknowledged by the courts that it is often difficult to draw a precise line between expenditures for construction and those expenses which are incidental to operating or maintaining the plant. Hence a great deal of discretion, that is, managerial discretion, must be exercised in each determination of costs. Practical methods vary not only among industries but also within any particular industry. This in itself is not objectionable. The important thing is that some acceptable method be adopted and adhered to consistently, changes being made whenever advisable for the future and proper publicity given to any change of method.

"The problem of matching costs with revenues is not simple in practice. Many costs are joint costs in one way or another, that is to say, they consist of expenditures incurred which represent services applicable to two or

more items or functions. Some of the costs of manufacturing industries are allocated to as many as hundreds of products. The cost of hauling different classes of freight is a problem of joint costs which still defies practical solution. The cost of distributing electricity is so difficult of determination that very few cost studies have ever been published in connection therewith. The reason is joint costs. The most common joint costs are overheads or indirect costs. Overhead or indirect costs are costs which are not incurred directly or solely for an individual item or function. Therefore, overheads must be allocated or prorated on some basis to the several items or functions to which they are related.

"There is not just one and only one acceptable method of allocating or prorating overhead costs. Many methods are in practical use. Great choice is allowed in the field of accounting and management. No system of accounts prescribed by any regulatory commission, to my knowledge, lays down the basis or method which must be followed in making distribution of overhead expenditures. It is important that the method of allocation be equitable and that reasonably accurate accounting results be obtained, but further than this the various uniform systems of accounts are silent.

"It is not necessary under accepted principles of accounting that overheads, such as general and administrative expenses, be classified as construction overheads at all. When an industrial or commercial concern constructs a new plant, it does not usually charge to the cost thereof any amount for regular officers' salaries, even though officers whose compensation is normally charged to the general and administrative expense accounts spend considerable time in supervising the construction work. The classification of accounts prescribed by the Interstate Commerce Commission for steam railroads prohibits the allocation of general and administrative expenses to construction. General and administrative expenses go on generally in the same amount whether or not any construction is in progress, and there is good logic to support the principle that only such part thereof as is incurred specifically for construction purposes should be capitalized.

"For several years during the late 1920's and the earlier 1930's, while associated with public accounting practice, on numerous occasions I examined the records and the accounting practices of companies in the extractive industries, particularly coal mining companies and natural gas companies. These engagements included comprehensive annual audits of the accounts of such companies, investigations in connection with acquisitions of such properties, and preparation of their Federal income tax returns. As previously stated, the extractive industries frequently charge many items to current expenses which other industries, particularly the utility industry, would likely charge to plant. Generally speaking, the extractive industries are and have been much more conservative in charging items to plant than other business enterprises. There is a decided tendency on their part, well supported by accounting principles and practices, to charge items to expense rather than to plant.

"One theory of accounting followed by a great many coal mining companies, representing the views of able management and accountants in that industry, involves charging directly to expense any addition of property or plant or other expenditure required to maintain the productive output of the mine. This often includes large units, such as locomotives, cars, and long stretches of new track, and large amounts of related development costs. This practice has been accepted by the Bureau of Internal Revenue for income tax purposes, if followed consistently, and was upheld in the courts.

"For many years it was practically the universal practice of natural gas companies, and I understand it is still the practice of some oil companies, to charge what are termed 'intangible drilling and development costs' to expense. These items are wages, fuel, repairs, hauling, supplies, and so forth, incident to and necessary for the drilling of wells, preparation of wells for production of oil and gas, and similar expenses for gathering lines. To a much less extent the cost of labor in laying transmission and distribution lines as distinguished from gathering lines was also charged to expense. I do not believe, however,

that this latter practice was very widespread. In the past natural gas companies have been more reluctant than electric utilities to charge overhead costs to plant accounts.

"The so-called intangible drilling and development costs have been charged to expense under the principle that they represent cost of keeping up and maintaining the business rather than the cost of improving it or adding thereto. The accounting practice is based upon the reasoning that the cost of drilling wells and laying gathering lines are for the purpose of maintaining a supply of gas and not adding to that supply. It has been pointed out that the old wells were being exhausted and new wells had to be drilled in order to maintain the supply of gas for customers. The cost of materials such as pipe, casing, and so forth, could be salvaged later but the miscellaneous charges I have mentioned have no salvage value. Hence only the cost of material could be capitalized under the principle referred to above. The principle and practices applied represent sound, accepted accounting if adhered to consistently.

"In the early income tax laws, such as the Revenue Act of 1918, the problem of accounting for the so-called intangible costs arose. Article 223 of Regulations 45 relative to the 1918 Revenue Act specifically allowed natural gas companies the option of charging such items to expense or of capitalizing them. However, once the taxpayer had exercised his option, he was required from then on to follow that method consistently. It is a basic philosophy of the income tax law, that the taxpayer's accounting method should be followed for computing taxable income unless his method clearly does not result in the true income.

"Numerous authorities have sanctioned the charging of intangibles to operating expense. The Public Service Commission of West Virginia and the Public Service Commission of Indiana have allowed such items as expenses in rate proceedings. Under the present uniform system of accounts for oil companies issued by the American Petroleum Institute, it is permissible to charge the items in question to current expense by means of a reserve account. When the Public Utility Commission of Pennsylvania had

under consideration in 1919 a system of accounts for natural gas companies, the accounting committee of the Natural Gas Association of America appealed to that commission to include drilling costs and the costs of laying gathering lines as current expenses.

"The foregoing indicated accounting practices of the extractive industries conform to sound accounting principles even though they differ (for good reason) from the practices followed by most other industries. These practices are and have been very widespread and we may, therefore, characterize them as general practices in the extractive industries. They have long represented accepted principles of accounting and have been the basis of reports to investors, prospectuses, security listings and income tax returns. The only reason that some of the natural gas companies do not follow the same practices today, in my opinion, is that systems of accounts prescribed by regulatory commissions having jurisdiction require a different practice.

"The fact that the new systems of accounts do not permit continuation of some of the former practices is not any indication that they were wrong or unacceptable. Uniformity in regulation of utilities is generally considered desirable and with that in mind accounting methods deemed preferable have been written into the systems of accounts effective as of specified dates, but not made retroactive prior to such dates.

"In order to understand more clearly the significance of the foregoing discussion it is necessary to consider the relative importance of the income statement as compared with the balance sheet and particularly the plant account.

"The accounts which are reflected in the income statement, that is revenue and expense accounts, are the media through which costs are matched against revenues. Here is indeed the crux or the central problem of accounting, the pivot around which all accounting phenomena revolve. Professor Paton has recently expressed the same idea in slightly different language as follows: (See page 7 of 'Recent and Prospective Developments in Accounting Theory' by William A. Paton, published by Harvard University Graduate School of Business Administration, 1940)